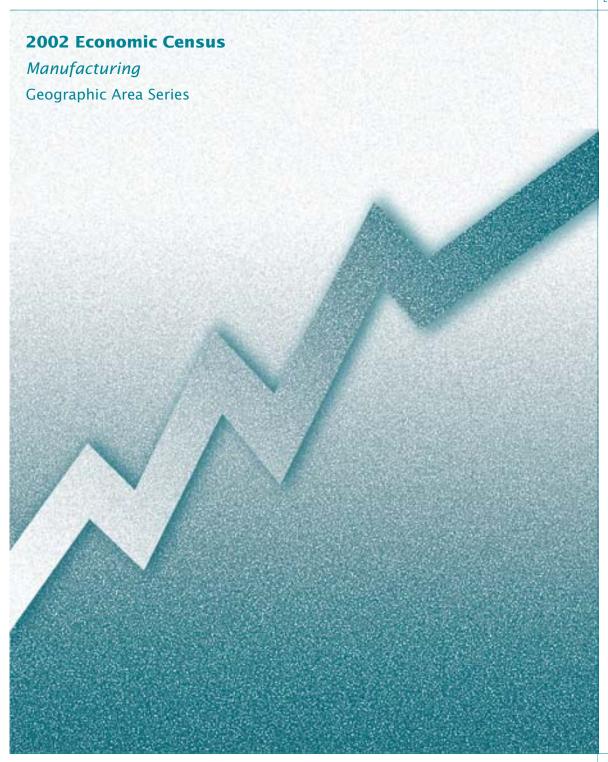
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2002 Economic Census

Manufacturing
Geographic Area Series





U.S. Department of Commerce Carlos M. Gutierrez,

Secretary

David A. Sampson, Deputy Secretary

Economics and Statistics Administration Kathleen B. Cooper,

Under Secretary for Economic Affairs

U.S. CENSUS BUREAU Charles Louis Kincannon,

Director



Economics and Statistics Administration Kathleen B. Cooper, Under Secretary for Economic Affairs



U.S. CENSUS BUREAU Charles Louis Kincannon, Director

Hermann Habermann,Deputy Director and
Chief Operating Officer

Thomas L. Mesenbourg, Associate Director for Economic Programs

Thomas L. Mesenbourg, Acting Assistant Director for Economic Programs

William G. Bostic, Jr., Chief, Manufacturing and Construction Division

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

The economic census is the major source of facts about the structure and functioning of the nation's economy. It provides essential information for government, business, industry, and the general public. Title 13 of the United States Code (Sections 131, 191, and 224) directs the Census Bureau to take the economic census every 5 years, covering years ending in "2" and "7."

The economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the federal government use the data to monitor economic activity and to assess the effectiveness of policies.
- State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.
- Trade associations study trends in their own and competing industries, which allows them to keep their members informed of market changes.
- Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

INDUSTRY CLASSIFICATIONS

Data from the 2002 Economic Census are published primarily according to the 2002 North American Industry Classification System (NAICS). NAICS was first adopted in the United States, Canada, and Mexico in 1997. The 2002 Economic Census covers the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), largely covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 100 subsectors (three-digit codes), 317 industry groups (four-digit codes), and, as implemented in the United States, 1,179 industries (six-digit codes).

RELATIONSHIP TO HISTORICAL INDUSTRY CLASSIFICATIONS

Prior to the 1997 Economic Census, data were published according to the Standard Industrial Classification (SIC) system. While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The 1997 Economic Census *Bridge Between NAICS and SIC* demonstrates the relationships between NAICS and SIC industries. Where changes are significant, it may not be possible to construct time series that include data for points both before and after 1997.

Most industry classifications remained unchanged between 1997 and 2002, but NAICS 2002 includes substantial revisions within the construction and wholesale trade sectors, and a number of revisions for the retail trade and information sectors. These changes are noted in industry definitions and will be demonstrated in the *Bridge Between NAICS 2002 and NAICS 1997*.

For 2002, data for enterprise support establishments (those functioning primarily to support the activities of their company's operating establishments, such as a warehouse or a research and development laboratory) are included in the industry that reflects their activities (such as warehousing). For 1997, such establishments were termed auxiliaries and were excluded from industry totals.

BASIS OF REPORTING

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company. (For selected industries, only payroll, employment, and classification are collected for individual establishments, while other data are collected on a consolidated basis.)

GEOGRAPHIC AREA CODING

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for states, metropolitan and micropolitan statistical areas, counties, and corporate municipalities (places) including cities, towns, townships, villages, and boroughs. Respondents were required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from administrative sources is used as a basis for coding.

AVAILABILITY OF ADDITIONAL DATA

All results of the 2002 Economic Census are available on the Census Bureau Internet site (www.census.gov) and on digital versatile discs (DVD-ROMs) for sale by the Census Bureau. The American FactFinder system at the Internet site allows selective retrieval and downloading of the data. For more information, including a description of reports being issued, see the Internet site, write to the U.S. Census Bureau, Washington, DC 20233-6100, or call Customer Services at 301-763-4100.

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart

from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some service trades in 1933. Censuses of construction, manufacturing, and the other business censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated, providing comparable census data across economic sectors and using consistent time periods, concepts, definitions, classifications, and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them census report forms.

The range of industries covered in the economic census expanded between 1967 and 2002. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity. New for 2002 is coverage of four industries classified in the agriculture, forestry, and fishing sector under the SIC system: landscape architectural services, landscaping services, veterinary services, and pet care services.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. Reports for 1997 were published primarily on the Internet and copies of 1992 reports are also available there. CD-ROMs issued from the 1987, 1992, and 1997 Economic Censuses contain databases that include all or nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for the 2002 Economic Census and related surveys is published in the *Guide to the 2002 Economic Census* at www.census.gov/econ/census02/guide. More information on the methodology, procedures, and history of the census will be published in the *History of the 2002 Economic Census* at www.census.gov/econ/www/history.html.

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Manufacturing

SCOPE

The Manufacturing sector (sector 31-33) comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying, as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership. The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing; and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are

considered manufacturing in NAICS: milk bottling and pasteurizing; water bottling and processing; fresh fish packaging (oyster shucking, fish filleting); apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations); as well as contracting on materials owned by others; printing and related activities; ready-mixed concrete production; leather converting; grinding of lenses to prescription; wood preserving; electroplating, plating, metal heat treating, and polishing for the trade; lapidary work for the trade; fabricating signs and advertising displays; rebuilding or remanufacturing machinery (i.e., automotive parts); ship repair and renovation; machine shops; and tire retreading.

Exclusions. There are activities that are sometimes considered manufacturing, but for NAICS are classified in another sector. These activities include logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting is considered a harvesting operation; the beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining; the construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction; establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

The tabulations for this sector do not include central administrative offices, warehouses, or other establishments that serve manufacturing establishments within the same organization. Data for such establishments are classified according to the nature of the service they provide. For example, separate headquarters establishments are reported in NAICS Sector 55, Management of Companies and Enterprises.

The reports described below exclude establishments of firms with no paid employees. These "nonemployers," typically self-employed individuals or partnerships operating businesses that they have not chosen to incorporate, are reported separately in Nonemployer Statistics. The contribution of nonemployers, relatively small for this sector, may be examined at www.census.gov/nonemployerimpact.

The reports described below cover all manufacturing establishments with one or more paid employees.

Definitions. Industry categories are defined in Appendix B, NAICS Codes, Titles, and Descriptions. Other terms are defined in Appendix A, Explanation of Terms.

REPORTS

The following reports provide statistics on this sector:

Industry Series. There are 473 reports, each covering a single NAICS industry (six-digit code). These reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, capital expenditures, etc. The industry reports also include data for states with 100 employees or more in the industry. The data in industry reports are preliminary and subject to change in the following reports.

Geographic Area Series. There are 51 separate reports, one for each state and the District of Columbia. Each state report presents similar statistics at the "all manufacturing" level for each state and its metropolitan and micropolitan areas with 250 employees or more, and for counties, consolidated cities, and places with 500 employees or more. The state reports also include sixdigit NAICS level data for industries with 100 employees or more in the state.

U.S. Census Bureau, 2002 Economic Census

Subject Series:

- **Industry-Product Analysis Summary.** This report presents value of shipments, value of product shipments, percentage of product shipments of the total value of shipments, and percentage of distribution of value of product shipments on the NAICS six-digit industry level and by the six- and seven-digit product code levels. It also includes miscellaneous receipts at the six- and seven-digit product code levels by NAICS six-digit industry levels.
- **General Summary.** This report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.
- **Product Summary.** This report summarizes the products data published in the industry reports. This report also includes a table with data for products that are primary to more than one industry, which are not in the industry reports.
- Materials Summary. This report summarizes the materials data published in the industry reports.
- **Concentration Ratio Summary.** This report publishes data on the percentage of value of shipments and value added accounted for by the 4-, 8-, 20-, and 50-largest companies for each manufacturing industry. Also shown in this report are Herfindahl-Herschmann indexes for each industry.
- Location of Manufacturing Plants Summary. This report contains statistics on the number of establishments for the three-and six-digit NAICS industry by state, county, place, and ZIP Code by employment-size of the establishment.

ZIP Code Statistics. This report contain statistics on the number of establishments for the three-and six-digit NAICS industry by employment-size of the establishment by ZIP Code.

Other reports. Data for this sector are also included in reports with multisector coverage, including Nonemployer Statistics, Comparative Statistics, Bridge Between 2002 NAICS and 1997 NAICS, Business Expenses, and the Survey of Business Owners reports.

GEOGRAPHIC AREAS COVERED

The level of geographic detail varies by report. Maps are available at www.census.gov/econ2002maps. Notes specific to areas in the state are included in Appendix D, Geographic Notes.

- 1. The United States as a whole.
- 2. States and the District of Columbia.
- 3. Metropolitan and micropolitan statistical areas with 250 employees or more. A core based statistical areas (CBSA) contains a core area with a substantial population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. CBSAs are differentiated into metropolitan and micropolitan statistical areas based on size criteria. Both metropolitan and micropolitan areas are defined in terms of entire counties, and are listed in Appendix E, Metropolitan and Micropolitan Statistical Areas.
 - a. Metropolitan Statistical Areas (metro areas). Metro areas have at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.
 - b. Micropolitan Statistical Areas (micro areas). Micro areas have at least one urban cluster of at least 10,000 but less than 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.
 - c. Metropolitan Divisions (metro divisions). If specified criteria are met, a metro area containing a single core with a population of 2.5 million or more may be subdivided to form smaller groupings of counties referred to as Metropolitan Divisions.

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- d. Combined Statistical Areas (combined areas). If specified criteria are met, adjacent metro and micro areas, in various combinations, may become the components of a new set of areas called Combined Statistical Areas. The areas that combine retain their own designations as metro or micro areas within the larger combined area.
- 4. Counties and county equivalents defined as of January 1, 2002, with 500 employees or more. Counties are the primary divisions of states, except in Louisiana where they are called parishes and in Alaska where they are called boroughs, census areas, and city and boroughs. Maryland, Missouri, Nevada, and Virginia have one place or more that is independent of any county organization and constitutes primary divisions of their states. These places are treated as counties and as places.
- 5. Economic places with 500 employees or more.
 - a. Municipalities of 2,500 inhabitants or more defined as of January 1, 2002. These are areas of significant population incorporated as cities, boroughs, villages, or towns according to the 2000 Census of Population. For the economic census, boroughs and census areas in Alaska and boroughs in New York are not included in this category.
 - b. Consolidated cities defined as of January 1, 2002. Consolidated cities are consolidated governments that consist of separately incorporated municipalities.
 - c. Townships in Michigan, New Jersey, and Pennsylvania, and towns in New York, Wisconsin, and the six New England states with 10,000 inhabitants or more (according to the 2000 Census of Population).
 - d. Balance of county. Areas outside the entities listed above, including incorporated municipalities with populations of fewer than 2,500, town and townships not qualifying as noted above, and the remainders of counties outside places are categorized as "Balance of county."

DOLLAR VALUES

All dollar values presented are expressed in current dollars; i.e., 2002 data are expressed in 2002 dollars, and 1997 data, in 1997 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

COMPARABILITY OF THE 1997 AND 2002 ECONOMIC CENSUSES

Both the 2002 Economic Census and the 1997 Economic Census present data based on the North American Industry Classification System (NAICS). While there were revisions to selected industries for 2002, this sector is not affected by those revisions.

For 2002, there have been several additional data tables added, which did not exist in 1997. These tables for 2002 include products primary to more than one industry, industry-product analysis, e-commerce value of shipments, and leased and nonleased detail employment statistics by subsectors.

RELIABILITY OF DATA

All data compiled for this sector are subject to nonsampling errors. Nonsampling errors can be attributed to many sources: inability to identify all cases in the actual universe; definition and classification difficulties; differences in the interpretation of questions; errors in recording or coding the data obtained; and other errors of collection, response, coverage, processing, and estimation for missing or misreported data. Selected data in tables titled "Detailed Statistics" are based on the Annual Survey of Manufactures and are subject to sampling errors as well as nonsampling errors.

No direct measurement of these effects has been obtained except for estimation for missing or misreported data, as by the percentages shown in the tables. Precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize the effects of nonsampling errors. More information on the reliability of the data is included in Appendix C, Methodology.

DISCLOSURE

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

The disclosure analysis for "industry statistics" files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. Nonetheless, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures, which can be suppressed even though value of shipments data are published.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The Census Bureau conducts the Annual Survey of Manufactures (ASM) in each of the 4 years between the economic censuses. The ASM is a probability-based sample of approximately 55,000 establishments and collects many of the same industry statistics (including employment, payroll, value of shipments, etc.) as the economic census. However, there are selected statistics not included in the ASM. Among these are the number of companies and establishments, detailed product and materials data, and substate geographic data. In addition to the ASM, the Census Bureau conducts the Current Industrial Reports (CIR) program. The CIR program publishes selected detailed product statistics for selected manufacturing industries at the U.S. level annually and, in some cases, monthly and/or quarterly. The Census Bureau also conducts the monthly Manufacturers' Shipments, Inventories, and Orders (M3) Program, which publishes detailed statistics for manufacturing industries at the U.S. level.

In addition, the County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county, and Statistics of U.S. Businesses provides annual statistics classified by the employment size of the enterprise, further classified by industry for the United States, and by broader categories for states and metropolitan areas.

CONTACTS FOR DATA USERS

Questions about these data may be directed to the U.S. Census Bureau, Manufacturing & Construction Division, Information Services Center, 301-763-4673 or ask.census.gov.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with these data:

- A Standard error of 100 percent or more
- D Withheld to avoid disclosing data of individual companies; data are included in higher level totals
- F Exceeds 100 percent because data include establishments with payroll exceeding revenue
- N Not available or not comparable
- S Withheld because estimates did not meet publication standards
- X Not applicable
- Z Less than half the unit shown
- a 0 to 19 employees
- b 20 to 99 employees
- c 100 to 249 employees

e f g h i j k	250 to 499 employees 500 to 999 employees 1,000 to 2,499 employees 2,500 to 4,999 employees 5,000 to 9,999 employees 10,000 to 24,999 employees 25,000 to 49,999 employees 50,000 to 99,999 employees
m	100,000 employees or more
p q r s nsk - (CC)	10 to 19 percent estimated 20 to 29 percent estimated Revised Sampling error exceeds 40 percent Not specified by kind Represents zero (page image/print only) Consolidated city Independent city

Table 1. Industry Statistics for the State: 2002

	and geographical delimitions, see note at	Tona	or table. I	OI IIIIOIIII	allon on geo	grapriic areas i	ollowed by ,	3cc Append	iix D. Torrilea	illing of abbrevie	tilons and symbo	513, 366 ITH OddC	lory text]
			A establish	II nments ²	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	UTAH												
31-33	Manufacturing	1	3 061	818	109 944	4 001 272	73 961	142 385	2 156 682	12 158 925	12 900 605	25 104 045	786 006
311	Food manufacturing	_	^r 255	84	r13 868	r406 393	r9 676	r19 081	r237 329	r1 504 241	r2 557 407	r4 054 440	r131 421
3111	Animal food manufacturing	1	20	7	566	22 015	375	835	13 238	65 075	101 182	166 580	4 370
31111	Animal food manufacturing	1	20	7	566	22 015	375	835	13 238	65 075	101 182	166 580	4 370
311111	Dog and cat food manufacturing	_	2	1	С	D	D	D	D	D	D	D	D
311119	Other animal food manufacturing	1	18	6	е	D	D	D	D	D	D	D	D
3112	Grain and oilseed milling	-	8	5	254	8 927	170	369	5 777	34 530	93 375	128 053	1 286
31121	Flour milling and malt		۰	_	054	9 007	170	260	E 777	24 520	02 275	100 050	1 006
311211	manufacturing	_	8 8	5 5	254 254	8 927 8 927	170 170	369 369	5 777 5 777	34 530 34 530	93 375 93 375	128 053 128 053	1 286 1 286
3113	Sugar and confectionery product	1	31	8		D	D	D	D	D	D	D	1 344
31133	manufacturing Confectionery manufacturing	'	31	0	'	D		Ь	D	D			1 344
311330	from purchased chocolate Confectionery manufacturing	1	17	4	329	6 956	259	375	4 567	20 396	13 248	33 185	256
	from purchased chocolate	1	17	4	329	6 956	259	375	4 567	20 396	13 248	33 185	256
31134	Nonchocolate confectionery manufacturing	_	11	4	528	11 348	418	799	7 420	24 261	12 642	36 757	1 048
311340	Nonchocolate confectionery manufacturing	_	11	4	528	11 348	418	799	7 420	24 261	12 642	36 757	1 048
3114	Fruit and vegetable preserving												
	and specialty food manufacturing	_	15	9	2 766	83 218	1 510	3 426	32 794	222 341	372 408	591 334	64 875
31141	Frozen food manufacturing	_	8	5	2 140	53 695	1 352	3 144	29 341	156 172	304 056	460 795	D
311411	Frozen fruit, juice, and vegetable manufacturing	_	4	2	С	D	D	D	D	D	D	D	1 790
311412	Frozen specialty food manufacturing	_	4	3	g	D	D	D	D	D	D	D	D
31142	Fruit and vegetable canning, pickling, and drying		7	4	626	29 523	158	282	3 453	66 169	68 352	130 539	D
311421	Fruit and vegetable canning .	_	4	2	e	29 323 D	D	D	3 433 D	D 103	D	D	D
311423	Dried and dehydrated food manufacturing	-	3	2	С	D	D	D	D	D	D	D	D
3115	Dairy product manufacturing	1	31	15	2 463	82 791	1 833	3 736	54 143	281 903	899 689	1 182 882	35 774
31151	Dairy product (except frozen)		0.5	10	0.100	70.017	1 000	0.000	40 505	047 510	707 000	1 005 007	04 400
311511 311513 311514	manufacturing Fluid milk manufacturing Cheese manufacturing Dry, condensed, and evaporated dairy product	1 1	25 8 7	10 5 4	2 186 793 1 020	73 017 29 506 32 422	1 669 482 908	3 392 1 098 1 851	48 525 16 303 27 330	247 516 124 034 104 924	787 322 196 086 520 223	1 035 967 317 089 625 909	34 436 26 891 6 891
31152	manufacturing Ice cream and frozen dessert	-	9	1	е	D	D	D	D	D	D	D	D
311520	manufacturing	3	6	5	277	9 774	164	344	5 618	34 387	112 367	146 915	1 338
	manufacturing	3	6	5	277	9 774	164	344	5 618	34 387	112 367	146 915	1 338
3116	Animal slaughtering and processing	-	35	12	2 570	61 110	2 246	4 662	47 381	174 653	727 053	899 068	7 898
31161	Animal slaughtering and processing	_	35	12	2 570	61 110	2 246	4 662	47 381	174 653	727 053	899 068	7 898
311611	Animal (except poultry) slaughtering	_	19	2	g	D	D	D	D	D	D	D	1 462
311612	Meat processed from carcasses	_	12	7	555	13 870	483	988	10 290	53 029	134 341	186 544	02 D
311615	Poultry processing	-	3	2	f	D	D	D	D	D D	D	D	Ď
3118	Bakeries and tortilla manufacturing	1	r89	23	^r 3 813	r112 910	^r 2 486	^r 4 094	^r 62 270	^r 517 080	r230 288	¹ 745 502	r11 058
31181	Bread and bakery product manufacturing	1	¹ 77	20	r3 041	r89 485	r1 804	r2 754	r43 875	r364 037	r127 273	r489 117	r7 890
311811 311812	Retail bakeries	4	r49 21	4 9	r424 1 743	r5 446 60 424	r222 844	r260 1 079	r2 699 25 637	r12 557 275 474	r4 833 56 945	r17 391 332 655	r298 5 749
311813	Frozen cakes, pies, and other pastries			J	1 740	00 424	011	1 0/0	20 007	270 474	00 040	302 300	0 740
31182	manufacturing Cookie, cracker, and pasta	1	7	7	874	23 615	738	1 415	15 539	76 006	65 495	139 071	1 843
311821	manufacturing	2	6	3	f	D	D	D	D	D	D	D	3 134
	manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
311822	Flour mixes and dough manufacturing from				_	5	5			5	5		
0110	purchased flour	9	24	1	569	D	D	766	D 0.451	D	D 105 641	D	D D
3119 31191	Other food manufacturing Snack food manufacturing		24	5 2	569 C	16 768 D	369 D	766 D	9 451 D	162 323 D	105 641 D	267 519 D	D
311919	Other snack food	-	2	2		D	D	D	D	D	D	D	D
31194	manufacturing Seasoning and dressing	-			С								
311941	manufacturing	-	2	1	С	D	D	D	D	D	D	D	D
31199	manufacturing	-	2 19	1 2	c e	D D	D D	D D	D D	D D	D D	D D	D D
311991	Perishable prepared food manufacturing	-	4	1	С	D	D	D	D	D	D	D	D
311999	All other miscellaneous food manufacturing	_	15	1	125	3 951	98	188	2 722	36 358	34 350	70 440	971

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			establish	nments ²	All em	ployees	Pro	duction wor	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or	Number ³	Payroll	Number ⁴	Hours	Wages	Value added	Total cost of materials	Total value of shipments	Total capital expendi- tures
	LITALL Con	Ε.	Total	more	Number	(\$1,000)	Number.	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	UTAH—Con.												
312	Beverage and tobacco product manufacturing	4	15	5	400	14 440	237	453	7 265	47 203	194 864	241 228	9 457
3121	Beverage manufacturing	4	15	5	400	14 440	237	453	7 265	47 203	194 864	241 228	9 457
31211	Soft drink and ice manufacturing	4	11	5	369	13 289	217	422	6 595	41 171	192 775	233 093	9 418
312111	Soft drink manufacturing	4	4	4	336	12 763	195	408	6 456	40 335	192 494	231 623	9 378
314	Textile product mills	5	¹ 60	^r 10	^r 820	^r 20 058	^r 612	^r 1 074	r12 101	r44 563	^r 41 146	r83 965	D
3141	Textile furnishings mills	^r 7	^r 19	^r 1	^r 122	^r 2 893	r101	^r 189	r1 932	¹ 7 687	r10 939	r18 334	D
3149	Other textile product mills	4	41	9	698	17 165	511	885	10 169	36 876	30 207	65 631	D
31491 314912	Textile bag and canvas mills Canvas and related product	4	22	4	302	8 042	220	372	4 738	14 460	9 893	24 138	669
31499 314991	mills	5 4	14 19	3 5	228 396	6 641 9 123	152 291	248 513	3 640 5 431	11 460 22 416	8 251 20 314	19 906 41 493	574 D
314999	mills	4	2	2	С	D	D	D	D	D	D	D	D
	product mills	5	17	3	е	D	D	D	D	D	D	D	141
315	Apparel manufacturing	-	48	7	1 153	22 900	924	1 584	16 088	36 845	26 785	64 514	D
3151	Apparel knitting mills	-	3	1	f	D	D	D	D	D	D	D	D
31519 315192	Other apparel knitting mills Underwear and nightwear knitting mills	_	1	1	f f	D D	D D	D D	D D	D D	D D	D D	D D
3152	Cut and sew apparel manufacturing	1	36	4	400	6 534	360	701	5 495	9 022	10 390	20 055	D
31521	Cut and sew apparel contractors	6	22	1	119	1 724	113	216	1 559	2 484	482	2 965	17
31529	Other cut and sew apparel manufacturing	_	9	3	272	4 483	241	477	3 824	5 949	9 344	15 939	16
315299	All other cut and sew apparel manufacturing	_	6	2	241	4 017	227	462	3 629	5 289	8 860	14 795	D
3159	Apparel accessories and other apparel manufacturing	1	9	2	С	D	D	D	D	D	D	D	D
31599	Apparel accessories and other apparel manufacturing	1	9	2	С	D	D	D	D	D	D	D	D
315999	Other apparel accessories and other apparel manufacturing	1	8	2	С	D	D	D	D	D	D	D	D
316	Leather and allied product												
	manufacturing	1	16	1	122	2 619	88	155	1 501	4 731	4 756	9 804	D
321	Wood product manufacturing	2	150	36	2 429	72 164	1 889	3 621	49 064	121 808	172 526	293 561	5 192
3211	Sawmills and wood preservation .	7	21	_	143	4 302	125	217	3 315	9 356	16 489	25 841	588
32111 321113	Sawmills and wood preservation	7 8	21 18	-	143 134	4 302 3 773	125 121	217 209	3 315 3 165	9 356 8 555	16 489 15 046	25 841 23 596	588 564
3212	Veneer, plywood, and engineered wood product manufacturing	_	22	13	706	22 855	587	1 191	18 273	37 798	39 535	77 481	797
32121	Veneer, plywood, and engineered wood product												
321214	manufacturing Truss manufacturing	_	22 19	13 12	706 656	22 855 21 313	587 544	1 191 1 103	18 273 17 094	37 798 34 571	39 535 32 492	77 481 67 349	797 684
3219	Other wood product manufacturing	2	107	23	1 580	45 007	1 177	2 213	27 476	74 654	116 502	190 239	3 807
32191 321911	Millwork	2	62	13	1 050	31 896	761	1 456	18 738	47 005	90 640	136 923	2 786
321912	manufacturing Cut stock, resawing lumber,	1	21	2	457	15 317	345	652	8 960	20 223	52 201	72 052	773
321918	and planing Other millwork (including	1	8	4	245	5 509	155	290	3 450	8 201	11 529	19 773	1 492
32192	flooring) Wood container and pallet	2	33 16	7 6	348 306	11 070 7 389	261	514 458	6 328	18 581 13 224	26 910 16 892	45 098 30 051	521 627
321920	manufacturing Wood container and pallet manufacturing	2	16	6	306	7 389	239 239	458 458	4 885 4 885	13 224	16 892	30 051	627
32199	All other wood product manufacturing	4	29	4	224	5 722	177	299	3 853	14 425	8 970	23 265	394
321999	All other miscellaneous wood product manufacturing	3	21	2	143	3 113	111	174	2 153	8 442	3 894	12 285	212
322	Paper manufacturing	_	32	18	2 822	99 584	2 320	4 415	74 484	563 608	375 347	944 532	27 595

terms,	and geographical definitions, see note at	end	of table.	For inform	ation on geo	graphic areas	followed by *,	see Append	dix D. For mea	ning of abbrevia	ations and symbo	ols, see introduc	tory text]
			A establisl	II nments ²	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	UTAH-Con.												
322 3222	Paper manufacturing — Con. Converted paper product manufacturing	-	32	18	2 822	99 584	2 320	4 415	74 484	563 608	375 347	944 532	27 595
32221	Paperboard container manufacturing		14	11	1 104	41 872	845	1 755	26 651	93 581	145 476	238 542	D
322211	Corrugated and solid fiber box manufacturing		8	6	629	24 889	432	873	14 311	60 515	117 077	177 756	7 989
322212	Folding paperboard box manufacturing	_	3	3	е	D. 000	D	D	D	D	D	D	. 555 D
32222	Paper bag and coated and treated paper manufacturing	1	7	1	е	D	D	D	D	D	D	D	737
322224	Uncoated paper and multiwall bag manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
32223 322231	Stationery product manufacturing Die-cut paper and	-	5	4	е	D	D	D	D	D	D	D	1 721
322232	paperboard office supplies manufacturing Envelope manufacturing	-	3 2	2	e c	D D	D D	D D	D D	D D	D D	D D	D D
32229	Other converted paper product manufacturing	_	6	2	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
322299	All other converted paper product manufacturing	-	5	1	С	D	D	D	D	D	D	D	218
323	Printing and related support activities	1	290	62	5 593	177 049	3 981	7 388	108 064	529 553	237 504	767 578	25 012
3231	Printing and related support activities	1	290	62	5 593	177 049	3 981	7 388	108 064	529 553	237 504	767 578	25 012
32311 323110	Printing	1	261	57	5 295	169 667	3 740	6 954	103 011	515 429	233 299	749 182	24 448
323112	printing	1	111	30	2 710 172	89 595 8 338	1 965 107	3 684 200	56 700 4 161	246 565 18 500	116 908 16 590	363 933 35 133	14 880 D
323113 323114 323115	Commercial screen printing Quick printing Digital printing	2 2 7	40 47 13	6 1 3	616 224 289	15 251 5 395 10 920	485 165 170	781 223 319	8 700 3 461 5 203	27 081 14 932 22 887	16 675 6 350 10 646	44 526 21 260 33 524	1 390 282 769
323116	Manifold business forms	_	6	4	471	14 710	359	751	10 065	134 311	25 706	159 957	1 049
323117 323118	Books printing	1 2	8	4 5	229	7 983 12 908	147 240	305 509	4 685 7 203	21 331 20 762	14 922 19 715	36 003 39 988	2 547 379
323119 32312	Other commercial printing Support activities for printing	4 5	19 29	1 5	438 c 298	D 7 382	D 241	D 434	7 203 D 5 053	20 762 D 14 124	19 713 D 4 205	D 18 396	269 564
323121	Tradebinding and related work	4	13	4	245	5 605	204	385	3 966	11 403	3 725	15 195	506
324	Petroleum and coal products manufacturing	_	17	5	804	51 791	534	1 128	33 276	192 912	1 623 119	1 804 198	40 288
3241	Petroleum and coal products manufacturing	_	17	5	804	51 791	534	1 128	33 276	192 912	1 623 119	1 804 198	40 288
32411 324110	Petroleum refineries Petroleum refineries	-	5 5	4 4	705 705	47 849 47 849	466 466	1 022 1 022	30 836 30 836	175 996 175 996	1 579 667 1 579 667	1 745 287 1 745 287	38 545 38 545
325	Chemical manufacturing	2	128	47	5 929	248 030	2 931	5 667	94 797	982 851	588 530	1 561 938	62 984
3251	Basic chemical manufacturing	-	16	6	571	27 889	304	601	11 902	137 543	73 334	202 530	9 534
32518 325188	Other basic inorganic chemical manufacturing	-	5	3	е	D	D	D	D	D	D	D	D
32519	chemical manufacturing Other basic organic chemical	-	4	3	287	13 855	156	281	6 079	82 661	33 466	107 544	5 173
325199	manufacturing	2	7	2	С	D	D	D	D	D	D	D	D -
3252	chemical manufacturing Resin, synthetic rubber, and artificial synthetic fibers and	-	5	2	213	9 349	124	269	4 568	16 666	24 650	41 507	D
32521	filaments manufacturing	-	2	2	С	D	D	D	D	D	D	D	D
325211	manufacturing	-	2 2	2	С	D D	D D	D D	D D	D D	D D	D D	D D
3253	manufacturing Pesticide, fertilizer, and other	_	2	2	С	U	الم	D	"	ט	ט	ט	D
0230	agricultural chemical manufacturing	4	13	3	С	D	D	D	D	D	D	D	2 349
32531	Fertilizer manufacturing	4	10	2	124	3 827	81	167	2 365	9 334	26 143	35 036	D
3254	Pharmaceutical and medicine manufacturing	3	37	23	2 855	114 684	1 213	2 406	34 286	476 999	216 239	690 683	24 547
32541	Pharmaceutical and medicine manufacturing	3	37	23	2 855	114 684	1 213	2 406	34 286	476 999	216 239	690 683	24 547
325411 325412	Medicinal and botanical manufacturing Pharmaceutical preparation	2	8	4	е	D	D	D	D	D	D	D	1 970
325414	manufacturing Biological product (except	3	25	15	2 092	87 509	779	1 510	23 561	410 743	168 834	580 273	19 589
	diagnostic) manufacturing	9	3	3	441	15 615	262	565	6 452	35 499	20 564	53 343	D

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			A establisl	ll hments ²	All em	ployees	Pro	oduction worl	kers				
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	UTAH—Con.												
325 3255	Chemical manufacturing – Con. Paint, coating, and adhesive manufacturing	4	10	1	107	4 677	52	107	1 774	9 977	12 274	22 686	617
32551	Paint and coating												
325510	manufacturing	4	10	1	107	4 677	52	107	1 774	9 977	12 274	22 686	617
0050	manufacturing	4	10	1	107	4 677	52	107	1 774	9 977	12 274	22 686	617
3256	Soap, cleaning compound, and toilet preparation manufacturing.	1	22	7	1 597	67 173	757	1 295	23 919	212 808	192 465	406 887	20 449
32561	Soap and cleaning compound manufacturing	1	12	3	1 159	45 177	500	852	14 074	179 145	163 588	343 305	D
325611	Soap and other detergent manufacturing	-	7	1	f	D	D	D	D	D	D	D	D
325612 32562	Polish and other sanitation good manufacturing Toilet preparation	8	5	2	С	D	D	D	D	D	D	D	D
325620	manufacturing Toilet preparation	_	10	4	438	21 996	257	443	9 845	33 663	28 877	63 582	D
020020	manufacturing	-	10	4	438	21 996	257	443	9 845	33 663	28 877	63 582	D
3259	Other chemical product and preparation manufacturing	1	28	5	486	22 131	374	768	14 902	105 413	47 509	152 406	D
32592 325920	Explosives manufacturing Explosives manufacturing	_	3 3	1 1	c c	D D	D D	D D	D D	D D	D D	D D	D D
32599	All other chemical product and preparation manufacturing	2	21	3	315	14 625	241	499	10 150	70 850	29 564	99 760	3 541
325998	All other miscellaneous chemical product and												
	preparation manufacturing .	-	10	2	С	D	D	D	D	D	D	D	2 968
326	Plastics and rubber products manufacturing	2	145	51	4 180	118 946	3 322	6 435	79 597	374 905	271 879	610 337	25 429
3261	Plastics product manufacturing	3	132	48	3 905	110 089	3 104	5 989	73 470	352 224	255 664	573 982	24 716
32611	Plastics packaging materials and unlaminated film and												
326111 326112	sheet manufacturing	_	10 2	3 1	588 e	13 632 D	510 D	1 035 D	9 758 D	58 174 D	46 439 D	104 970 D	D D
32612	manufacturing Plastics pipe, pipe fitting, and	-	2	1	С	D	D	D	D	D	D	D	D
000400	unlaminated profile shape manufacturing	7	14	5	258	7 915	184	367	4 873	19 166	39 638	58 079	D
326122	Plastics pipe and pipe fitting manufacturing	7	9	5	230	7 338	165	340	4 500	17 615	38 892	55 665	5 244
32614 326140	Polystyrene foam product manufacturing	1	9	3	189	5 299	149	313	3 617	35 726	21 769	56 724	737
32615	manufacturing Urethane and other foam	1	9	3	189	5 299	149	313	3 617	35 726	21 769	56 724	737
326150	product (except polystyrene) manufacturing Urethane and other foam	3	7	1	120	3 607	78	109	2 018	21 773	16 406	38 147	537
32616	product (except polystyrene) manufacturing Plastics bottle manufacturing	3 7	7 8	1 3	120 c	3 607 D	78 D	109 D	2 018 D	21 773 D	16 406 D	38 147 D	537 712
326160	Plastics bottle manufacturing	7	8	3	С	D	D	D	D	D	D	D	712
32619 326191	Other plastics product manufacturing	2	82	33	2 641	76 059	2 085	3 986	50 253	174 780	122 331	293 506	8 998
326191	manufacturing	-	10	5	f	D	D	D	D	D	D	D	D
020100	manufacturing	3	71	28	2 117	61 108	1 683	3 300	41 485	150 311	100 436	247 156	7 565
3262	Rubber product manufacturing	-	13	3	275	8 857	218	446	6 127	22 681	16 215	36 355	713
32622	Rubber and plastics hoses and belting manufacturing	_	1	1	С	D	D	D	D	D	D	D	D
326220	Rubber and plastics hoses and belting manufacturing	_	1	1	С	D	D	D	D	D	D	D	D
32629	Other rubber product manufacturing	1	6	2	141	5 339	106	224	3 534	11 503	6 942	18 698	272
326291	Rubber product manufacturing for mechanical use	1	3	1	С	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	3	^r 151	44	r3 038	r110 502	^r 2 314	r4 683	74 298	r330 804	¹ 280 307	'612 555	^r 22 935
3271	Clay product and refractory manufacturing	1	14	2	278	10 133	212	426	6 845	28 135	11 198	37 916	2 120
32712	Clay building material and refractories manufacturing	1	7	2	251	9 365	191	387	6 332	26 764	10 566	35 913	2 062
327121	Brick and structural clay tile manufacturing		2	2	251 C	9 365 D	D	387 D	0 332 D	26 764 D		35 913 D	2 062 D

terms,	and geographical definitions, see note at	end	of table.	or inform	ation on geog	graphic areas	followed by *,	see Append	lix D. For mea	ning of abbrevia	ations and symbo	ols, see introduct	tory text]
			A establisl	II nments ²	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	UTAH-Con.												<u> </u>
327 3273	Nonmetallic mineral product manufacturing—Con. Cement and concrete product manufacturing	3	^r 81	32	¹ 847	^r 66 172	^r 1 416	^r 2 806	^r 45 463	⁷ 221 016	⁷ 193 118	⁷ 415 919	^r 16 920
32731 327310	Cement manufacturing	_	2 2	2 2	c c	D D	D D	D D	D D	D D	D D	D D	D D
32732 327320	Ready-mix concrete manufacturing Ready-mix concrete	4	43	15	787	29 798	654	1 358	23 531	112 073	94 081	207 094	7 122
32733	manufacturing	4	43	15	787	29 798	654	1 358	23 531	112 073	94 081	207 094	7 122
327331	manufacturing	2	^r 16	9	^r 454	r16 731	r309	^r 644	r9 894	^r 47 199	r41 575	r89 589	^r 2 477
327332	manufacturing Concrete pipe	2	^r 10	5	⁷ 211	'7 875	^r 129	^r 281	^r 4 579	^r 20 250	'27 057	r46 811	r868
32739	manufacturing Other concrete product	1	6	4	243	8 856	180	363	5 315	26 949	14 518	42 778	1 609
327390	manufacturing	2	20	6	е	D	D	D	D	D	D	D	D
	manufacturing	2	20	6	е	D	D	D	D	D	D	D	D
3274	Lime and gypsum product manufacturing	4	8	3	С	D	D	D	D	D	D	D	884
32742	Gypsum product manufacturing	_	6	1	136	4 940	112	251	3 724	9 068	18 963	28 135	D
327420	Gypsum product manufacturing	_	6	1	136	4 940	112	251	3 724	9 068	18 963	28 135	D
3279	Other nonmetallic mineral product manufacturing	7	29	6	595	21 982	435	930	13 000	50 034	37 210	88 110	2 767
32791	Abrasive product	9	3	2		D	D	D	D	D	D	D	D
327910	manufacturing Abrasive product manufacturing	9	3	2	e e	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product manufacturing	6	26	4	e	D	D	D	D	D	D	D	D
327991	Cut stone and stone product manufacturing	7	20	3	261	8 124	213	434	6 058	15 798	8 360	25 137	1 157
004		,											
331	Primary metal manufacturing	_	^r 48	^r 22	r3 538	r146 073	^r 2 741	r5 707	r106 171	¹ 841 734	r1 046 845	r1 886 193	^r 23 294
3311	Iron and steel mills and ferroalloy manufacturing	_	2	1	е	D	D	D	D	D	D	D	D
33111 331111	Iron and steel mills and ferroalloy manufacturing Iron and steel mills	_	2 2	1 1	e e	D D	D D	D D	D D	D D	D D	D D	D D
3312	Steel product manufacturing from purchased steel	r6	r2	r2	С	D	D	D	D	D	D	D	D
3313	Alumina and aluminum production and processing	_	6	3	539	20 555	363	781	11 969	54 538	75 788	126 863	2 060
33131	Alumina and aluminum		_	_						_,			
331316	production and processing Aluminum extruded product manufacturing	_	6 2	3 2	539 e	20 555 D	363 D	781 D	11 969 D	54 538 D	75 788 D	126 863 D	2 060 D
3314	Nonferrous metal (except aluminum) production and processing	_	16	7	1 420	63 980	1 099	2 318	47 311	575 757	760 875	1 343 261	18 640
33141	Nonferrous metal (except aluminum) smelting and refining		6	4	f	D	D	D	D	D	D	D	D
331411	Primary smelting and refining of copper	_	2	2	, ,	D	D	D	D	D	D	D	D
331419	Primary smelting and refining of nonferrous metal (except copper and aluminum)	1	4	2	e	D	D	D	D	D	D	D	D
33142	Copper rolling, drawing, extruding, and alloying	_	2	1	c	D	D	D	D	D	D	D	D
331422	Copper wire (except mechanical) drawing	_	1	1	c	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and			•		5		5	, , ,	5			J
331491	alloying	_	8	2	е	D	D	D	D	D	D	D	D
	extruding	-	4	1	е	D	D	D	D	D	D	D	D
3315	Foundries	-	22	9	g	D	D	D	D	D	D	D	1 910
33151 331511	Ferrous metal foundries	-	10 6	5 3	541 400	17 435 14 299	430 320	903 649	12 194 10 092	49 038 42 325	36 428 33 556	82 866 73 865	1 264 D
331512 33152	Steel investment foundries Nonferrous metal foundries	_	3 12	2 4	c f	D D	D D	D D	D D	D D	D D	D D	D 646
331524	Aluminum foundries (except die-casting)	-	3	2	е	D	D	D	D	D	D	D	D
331525	Copper foundries (except diecasting)	4	8	2	c	D	D	D	D	D	D	D	82

terms,	and geographical definitions, see note at	ena	A							ning of apprevia	mons and symbo	ois, see introduct	lory text]
			establish	nments ²	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	UTAH-Con.												
332	Fabricated metal product manufacturing	1	r544	r130	r10 689	r375 848	^r 7 764	r14 580	r237 259	r817 269	r675 155	r1 502 033	r42 130
3321	Forging and stamping	-	15	5	433	12 351	250	504	6 255	23 516	38 708	64 747	900
33211 332116	Forging and stamping Metal stamping	_	15 6	5 4	433 343	12 351 9 373	250 178	504 363	6 255 4 160	23 516 17 855	38 708 28 128	64 747 45 188	900 810
3323	Architectural and structural metals manufacturing	1	185	57	4 486	169 995	3 173	6 208	102 726	361 363	385 243	747 288	15 497
33231 332311	Plate work and fabricated structural product manufacturing	-	84	31	2 535	94 611	1 815	3 396	60 301	222 381	257 429	478 887	7 954
000010	and component manufacturing	_	9	3	257	9 400	215	396	7 268	34 144	46 783	79 232	1 074
332312 332313 33232	Fabricated structural metal manufacturing	_ _	67 8	27 1	2 113 165	79 494 5 717	1 474 126	2 742 258	49 164 3 869	179 819 8 418	203 551 7 095	383 453 16 202	5 848 1 032
000004	metal products manufacturing	1	101	26	1 951	75 384	1 358	2 812	42 425	138 982	127 814	268 401	7 543
332321 332322	Metal window and door manufacturing	-	5	4	322	16 804	135	200	4 535	33 335	22 032	55 915	1 565
332323	Sheet metal work manufacturing Ornamental and architectural	1	54	14	1 097	40 057	822	1 812	25 963	73 724	67 248	142 008	4 260
002020	metal work manufacturing	2	42	8	532	18 523	401	800	11 927	31 923	38 534	70 478	1 718
3324	Boiler, tank, and shipping container manufacturing	_	8	6	f	D	D	D	D	D	D	D	766
33242	Metal tank (heavy gauge) manufacturing	_	7	5	433	16 448	321	675	11 629	26 889	25 524	54 803	D
332420 33243	Metal tank (heavy gauge) manufacturing	-	7	5	433	16 448	321	675	11 629	26 889	25 524	54 803	D
332439	Metal can, box, and other metal container (light gauge) manufacturing	_	1	1	С	D	D	D	D	D	D	D	D
	manufacturing	-	1	1	С	D	D	D	D	D	D	D	D
3325	Hardware manufacturing	1	6	2	120	3 192	88	179	2 059	8 426	7 831	16 383	252
33251 332510 3326	Hardware manufacturing Hardware manufacturing	1	6	2 2	120 120	3 192 3 192	88 88	179 179	2 059 2 059	8 426 8 426	7 831 7 831	16 383 16 383	252 252
33261	Spring and wire product manufacturing	r5	r14	r2	r101	r3 761	'77	r158	r2 406	r8 137	r16 277	r24 459	r535
33201	manufacturing	r5	r14	r2	r101	r3 761	'77	r158	r2 406	r8 137	r16 277	r24 459	r535
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	4	195	29	1 800	60 671	1 331	2 462	39 818	124 921	59 305	184 187	7 467
33271 332710	Machine shops	4	181 181	26 26	1 593 1 593	52 959 52 959	1 194 1 194	2 187 2 187	35 427 35 427	110 977 110 977	53 144 53 144	162 342 162 342	6 640 6 640
33272	Machine shops Turned product and screw, nut, and bolt manufacturing	2	14	3	207	7 712	137	275	4 391	13 944	6 161	21 845	827
332721	Precision turned product manufacturing	2	11	2	С	D	D	D	D	D	D	D	679
3328	Coating, engraving, heat treating, and allied activities	1	41	11	551	15 571	449	774	11 458	34 485	15 343	49 993	D
33281 332812	Coating, engraving, heat treating, and allied activities Metal coating, engraving	1	41	11	551	15 571	449	774	11 458	34 485	15 343	49 993	D
332813	(except jewelry and silverware), and allied services to manufacturers Electroplating, plating,	1	23	7	305	7 981	247	498	5 873	21 395	11 919	33 488	947
332013	polishing, anodizing, and coloring	1	17	4	С	D	D	D	D	D	D	D	215
3329	Other fabricated metal product manufacturing	1	70	17	2 497	84 671	1 870	3 413	55 102	218 939	115 429	336 509	15 453
33291 332911	Metal valve manufacturing Industrial valve	_	6	3	968	36 915	664	1 116	23 643	96 649	37 004	134 562	2 656
332912	manufacturing Fluid power valve and hose	-	4	2	е	D	D	D	D	D	D	D	D
33299	fitting manufacturing All other fabricated metal	-	1	1	f	D	D	D	D	D	D ====================================	D	D
332996	product manufacturing Fabricated pipe and pipe	1	64	14	1 529	47 756	1 206	2 297	31 459	122 290	78 425	201 947	12 797
332999	fitting manufacturing All other miscellaneous fabricated metal product manufacturing	1	10 37	3	183 1 155	7 238 34 835	151 891	309 1 638	5 551 21 543	13 190 82 502	13 742 55 036	28 473 136 799	1 096 11 278
333	Machinery manufacturing	1	r149	^r 40	¹ 5 316	¹ 215 980	r3 246	^r 6 446	r107 695	r490 672	r423 882	¹ 915 214	r26 720
000	wacminery manufacturing		149	40	0 3101	210 980	3 240	0 440	107 095	490 0/21	423 0021	910 2141	20 /20

terris, a	and geographical definitions, see note at	ena	A	JI .		ployees		duction work		Tilling of abbrevia	ations and symbol	ois, see introduc	lory text]
NAICS			establis			,							T-4-1
code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	UTAH-Con.												
333 3331	Machinery manufacturing—Con. Agriculture, construction, and mining machinery manufacturing	1	25	8	657	23 905	389	719	12 817	63 796	103 007	171 855	9 716
33312	Construction machinery												
333120	manufacturing Construction machinery	3	7	3	128	4 071	93	158	2 462	16 884	9 722	27 009	851
33313	manufacturing Mining and oil and gas field	3	7 11	3 5	128 498	4 071 18 787	93 273	158 518	2 462 9 686	16 884 44 519	9 722 90 009	27 009 139 177	851 8 755
333131	machinery manufacturing Mining machinery and equipment manufacturing	_	7	4	387	14 009	199	376	7 185	32 785	81 422	118 856	8 376
333132	Oil and gas field machinery and equipment manufacturing	9	4	1	111	4 778	74	142	2 501	11 734	8 587	20 321	379
3332	Industrial machinery manufacturing	_	22	6	550	21 317	355	677	10 563	41 438	29 028	67 666	1 081
33329	Other industrial machinery manufacturing	_	16	6	532	20 700	344	659	10 291	40 316	28 081	65 597	1 049
333298	All other industrial machinery manufacturing	_	8	4	431	16 669	289	554	8 245	31 168	23 752	52 772	818
3333	Commercial and service industry machinery manufacturing	1	r31	r 9	^r 1 004	^r 47 405	^r 482	¹ 965	^r 17 027	r122 884	'81 683	^r 200 896	r3 386
33331	Commercial and service industry machinery manufacturing	1	′31	r9	^r 1 004	^r 47 405	^r 482	^r 965	^r 17 027	r122 884	^r 81 683	^r 200 896	r3 386
333319	Other commercial and service industry machinery manufacturing	1	^r 19	r8	¹ 931	r45 002	^r 428	^r 865	^r 15 756	r116 724	76 304	^r 188 894	r3 206
3334	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	_	11	4	379	11 137	292	538	6 440	33 636	27 640	61 186	D
33341	Ventilation, heating, air- conditioning, and commercial refrigeration equipment												_
333411	manufacturing Air purification equipment	_	11	4	379	11 137	292	538 D	6 440	33 636	27 640	61 186	D
333415	manufacturing Air-conditioning and warm air heating equipment and commercial and industrial refrigeration equipment	_	2	2	С	D	D		D	D	D	D	D
3335	manufacturing Metalworking machinery	_	2	1	С	D	D	D	D	D	D	D	D
33351	manufacturing	3	32	2	С	D	D	D	D	D	D	D	548
	manufacturing	3	32	2	С	D	D	D	D	D	D	D	548
3336	Engine, turbine, and power transmission equipment manufacturing	_	2	1	е	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power transmission equipment				_						5		
333618	manufacturing Other engine equipment manufacturing	_	2	1	e e	D D	D D	D D	D D	D D	D D	D D	D D
3339	Other general purpose machinery manufacturing	-	26	10	2 140	89 078	1 237	2 512	41 480	179 939	138 808	321 082	8 304
33391	Pump and compressor manufacturing	_	3	2	С	D	D	D	D	D	D	D	D
333911	Pump and pumping equipment manufacturing	_	2	2	С	D	D	D	D	D	D	D	D
33392	Material handling equipment manufacturing	1	6	2	С	D	D	D	D	D	D	D	D
333922 33399	Conveyor and conveying equipment manufacturing All other general purpose	1	5	2	160	6 675	123	221	4 476	12 091	20 099	33 763	201
333993	machinery manufacturing Packaging machinery	-	17	6	1 769	71 875	1 039	2 145	34 482	147 890	104 374	252 139	7 601
333994	manufacturing Industrial process furnace	4	3	2	С	D	D	D	D	D	D	D	D
333995	and oven manufacturing Fluid power cylinder and actuator manufacturing	_	1 3	1 2	e g	D D	D D	D D	D D	D D	D D	D D	D D
334	Computer and electronic product manufacturing	1	r147	^r 64	r12 936	¹ 586 940	^r 6 846	13 630	⁷ 218 831	r1 633 262	¹ 885 151	'2 572 520	103 008
3341	Computer and peripheral equipment manufacturing	_	14	3	f	D	D	D	D	D	D	D	3 893
33411	Computer and peripheral		1.4		f	D	D	D	D	D	D	D	2 200
334111	equipment manufacturing Electronic computer manufacturing	-	14	3 2	f f	D		D	D	D	D	D	3 893 D

terms,	and geographical definitions, see note at	ena	A							ning of apprevia	and symbo	ois, see introduct	lory text]
			establis	nments ²	All em	ployees	Pro	duction worl	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	UTAH-Con.												
334 3342	Computer and electronic product manufacturing—Con. Communications equipment manufacturing	_	15	7	g	D	D	D	D	D	D	D	5 303
33421	Telephone apparatus manufacturing	1	6	3	С	D	D	D	D	D	D	D	D
334210 33422	Telephone apparatus manufacturing Radio and television broadcasting and wireless	1	6	3	С	D	D	D	D	D	D	D	D
334220	communications equipment manufacturing	-	8	3	е	D	D	D	D	D	D	D	D
33429	manufacturing Other communications	-	8	3	е	D	D	D	D	D	D	D	D
334290	equipment manufacturing Other communications equipment manufacturing	_	1	1	e e	D D	D D	D D	D D	D D	D D	D D	D D
3343	Audio and video equipment	3	12			D		D	D	D	D	D	
33431	manufacturing	3	12	4	С	U	D	U		U	ال	U	312
334310	manufacturing	3	12 12	4	c c	D D	D D	D D	D D	D D	D D	D D	312 312
3344	Semiconductor and other electronic component manufacturing	_	r46	^r 22	r3 403	r120 182	r2 472	r3 799	⁷ 76 101	^r 614 466	r160 098	r751 695	r35 818
33441	Semiconductor and other electronic component												
334412	manufacturing	_	r46	r22 5	r3 403	r120 182	r2 472	r3 799	76 101	r614 466	r160 098	r751 695	r35 818 D
334413	manufacturing Semiconductor and related device manufacturing	_	13	2	1 092	29 623 D	713 D	1 288 D	16 812 D	45 385 D	49 452 D	98 118 D	D D
334415	Electronic resistor manufacturing		2	1	g c	D	D	D	D	D	D	D	D
334418	Printed circuit assembly (electronic assembly)		_	· l		J	J			J			J
334419	manufacturing Other electronic component	-	'7	r2	r142	r3 817	r98	r104	r1 851	r9 516	r11 525	r20 732	D
0045	manufacturing	1	17	11	756	28 127	480	935	12 462	59 291	26 976	86 928	3 097
3345	Navigational, measuring, electromedical, and control instruments manufacturing	1	47	23	7 106	356 281	3 433	8 247	115 470	818 119	575 243	1 470 775	53 767
33451 334510	Navigational, measuring, electromedical, and control instruments manufacturing Electromedical and	1	47	23	7 106	356 281	3 433	8 247	115 470	818 119	575 243	1 470 775	53 767
334511	electrotherapeutic apparatus manufacturing Search, detection, navigation, guidance,	5	9	6	2 570	99 555	1 926	5 151	54 828	200 149	177 601	378 852	39 194
334514	aeronautical, and nautical system and instrument manufacturing Totalizing fluid meter and	-	6	2	g	D	D	D	D	D	D	D	D
334515	counting device manufacturing Instrument manufacturing for measuring and testing	-	2	1	С	D	D	D	D	D	D	D	D
334516	electricity and electrical signals	-	6	3	246	8 373	130	220	2 648	9 416	6 029	16 486	292
334517	instrument manufacturing	1	8	4	232	13 131	81	162	2 935	31 188	14 932	46 079	1 233
334519	manufacturing Other measuring and controlling device	-	4	3	f	D	D	D	D	D	D	D	5 819
0040	manufacturing	-	6	3	343	15 485	127	254	3 744	31 228	21 544	52 247	D
3346	Manufacturing and reproducing magnetic and optical media	3	13	5	е	D	D	D	D	D	D	D	3 915
33461 334612	Manufacturing and reproducing magnetic and optical media Prerecorded compact disc	3	13	5	е	D	D	D	D	D	D	D	3 915
304012	(except software), tape, and record reproducing	3	7	3	е	D	D	D	D	D	D	D	D
335	Electrical equipment, appliance, and component manufacturing	2	43	18	1 454	54 644	892	1 687	24 012	182 099	190 823	369 650	7 625
3351	Electric lighting equipment manufacturing	2	9	1	С	D	D	D	D	D	D	D	67
33512 335129	Lighting fixture manufacturing Other lighting equipment manufacturing	2	9 7	1	c	D D	D D	D D	D D	D D	D D	D D	67 D

$\label{table 1.} \begin{tabular}{ll} \textbf{Table 1.} & \textbf{Industry Statistics for the State: 2002} - \textbf{Con.} \\ \end{tabular}$

101110, 1	and geographical definitions, see note at	Ona	A	JI		ployees		duction worl		illing of abbrevia	ations and symbol	ns, see miroduc	lory text]
NAIGO			establis		All elli	pioyees		duction won	NC13				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	UTAH-Con.												
335	Electrical equipment, appliance, and												
3353	component manufacturing—Con. Electrical equipment manufacturing	7	16	5	300	13 968	189	239	3 298	46 040	33 667	79 973	D
33531	Electrical equipment manufacturing	7	16	5	300	13 968	189	239	3 298	46 040	33 667	79 973	D
335314	Relay and industrial control manufacturing	9	8	3	200	9 808	133	114	1 455	31 568	24 872	56 448	919
3359	Other electrical equipment and component manufacturing	-	17	11	969	33 833	625	1 305	19 161	120 595	137 685	255 772	5 942
33592	Communication and energy wire and cable manufacturing.	_	2	2	С	D	D	D	D	D	D	D	D
335929	Other communication and energy wire manufacturing.	_	2	2	С	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component												
335991	manufacturing Carbon and graphite product	1	13	8	741	26 364	408	882	12 358	82 114	81 825	162 797	4 484
335999	manufacturing	-	3	2	е	D	D	D	D	D	D	D	3 127
	electrical equipment and component manufacturing	3	10	6	е	D	D	D	D	D	D	D	1 357
336	Transportation equipment manufacturing	-	96	33	11 927	525 609	7 595	12 782	261 650	1 593 973	1 561 034	3 147 336	83 553
3362 33621	Motor vehicle body and trailer manufacturing	1	21	9	g	D	D	D	D	D	D	D	D
336212	Motor vehicle body and trailer manufacturing	1	21 3	9	g	D D	D D	D D	D D	D D	D D	D D	D D
336214	Travel trailer and camper manufacturing	4	12	6	527	12 954	440	915	10 245	25 398	40 311	66 102	2 754
3363	Motor vehicle parts manufacturing	-	40	15	5 302	181 929	4 429	6 755	136 013	674 084	1 162 382	1 850 182	44 713
33634	Motor vehicle brake system manufacturing		2	1	С	D	D	D	D	D	D	D	D
336340	Motor vehicle brake system manufacturing		2	1	c	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts manufacturing	_	18	12	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing	_	18	12	h	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	-	16	9	5 398	309 524	2 141	4 113	98 246	805 819	277 244	1 064 031	34 835
33641	Aerospace product and parts manufacturing	_	16	9	5 398	309 524	2 141	4 113	98 246	805 819	277 244	1 064 031	34 835
336412	Aircraft engine and engine parts manufacturing	_	3	2	f	D	D	D	D	D	D	D	D
336413	Other aircraft parts and auxiliary equipment				_								050
336415	manufacturing	-	8	3	е	D	D	D	D	D	D	D	358
	manufacturing	-	3	3	h	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	1	320	65	6 780	188 009	5 427	10 159	129 635	472 220	395 266	869 735	25 792
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	266	41	4 498	125 852	3 621	7 306	90 185	216 907	242 048	460 280	12 827
33711	Wood kitchen cabinet and countertop manufacturing	3	170	29	2 342	63 591	1 779	3 316	40 952	112 441	70 183	183 312	6 784
337110	Wood kitchen cabinet and countertop manufacturing	3	170	29	2 342	63 591	1 779	3 316	40 952	112 441	70 183	183 312	6 784
33712	Household and institutional furniture manufacturing	1	96	12	2 156	62 261	1 842	3 990	49 233	104 466	171 865	276 968	6 043
337121	Upholstered household furniture manufacturing	_	20	4	1 211	36 827	1 078	2 494	32 356	48 736	123 080	172 758	D
337122	Nonupholstered wood household furniture	_		_									
337127	manufacturing Institutional furniture manufacturing	2	61	5 1	556 285	12 845 10 001	483 196	933 392	10 211 4 868	24 764 25 428	26 354 13 060	50 912 38 619	610 D
3372	Office furniture (including fixtures) manufacturing	1	34	14	1 141	30 747	925	1 534	22 418	71 335	43 622	115 338	9 628
33721	Office furniture (including fixtures) manufacturing	1	34	14	1 141	30 747	925	1 534	22 418	71 335	43 622	115 338	9 628
337212	Custom architectural woodwork and millwork manufacturing	1	17	8	f	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, and locker manufacturing	1	13	5	503	12 566	412	801	9 561	37 705	22 149	60 000	D

[Includes data for industry groups and industries with 100 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

			establis		All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	UTAH-Con.												
337 3379	Furniture and related product manufacturing—Con. Other furniture related product manufacturing	_	20	10	1 141	31 410	881	1 319	17 032	183 978	109 596	294 117	3 337
33791 337910	Mattress manufacturing Mattress manufacturing	_	12 12	6	437 437	14 935 14 935	333 333	650 650	8 692 8 692	139 468 139 468	74 477 74 477	213 699 213 699	D D
33792	Blind and shade manufacturing	_	8	4	704	16 475	548	669	8 340	44 510	35 119	80 418	D
337920	Blind and shade manufacturing	-	8	4	704	16 475	548	669	8 340	44 510	35 119	80 418	D
339	Miscellaneous manufacturing	1	r393	^r 76	^r 16 084	r562 100	r10 575	^r 21 625	^r 282 427	^r 1 390 643	'1 345 290	r2 786 696	^r 114 306
3391	Medical equipment and supplies manufacturing	2	168	35	6 641	281 740	3 763	7 371	104 342	838 493	286 621	1 118 747	81 931
33911	Medical equipment and supplies manufacturing	2	168	35	6 641	281 740	3 763	7 371	104 342	838 493	286 621	1 118 747	81 931
339112	Surgical and medical instrument manufacturing	2	19	14	2 883	133 335	1 523	3 143	38 643	435 454	160 915	594 672	31 475
339113	Surgical appliance and supplies manufacturing	2	20	12	1 897	87 666	1 031	2 113	32 218	258 587	80 238	335 715	D
339114	Dental equipment and supplies manufacturing	_	17	1	671	25 893	338	586	9 751	63 565	16 257	79 144	D
339115	Ophthalmic goods manufacturing	_	8	3	465	10 942	352	615	6 467	30 737	19 805	50 710	D
339116	Dental laboratories	2	104	5	725	23 904	519	914	17 263	50 150	9 406	58 506	958
3399	Other miscellaneous manufacturing	1	^r 225	^r 41	^r 9 443	r280 360	^r 6 812	^r 14 254	r178 085	'552 150	r1 058 669	r1 667 949	r32 375
33991	Jewelry and silverware manufacturing	_	30	2	1 214	36 041	1 072	2 004	29 910	51 263	112 405	168 799	717
339911	Jewelry (except costume) manufacturing	_	23	1	g	D	D	D	D	D	D	D	699
33992	Sporting and athletic goods manufacturing	1	38	18	6 098	179 605	4 254	9 256	114 438	358 994	837 884	1 250 717	26 304
339920	Sporting and athletic goods manufacturing	1	38	18	6 098	179 605	4 254	9 256	114 438	358 994	837 884	1 250 717	26 304
33994	Office supplies (except paper) manufacturing	1	12	1	С	D	D	D	D	D	D	D	208
339943	Marking device manufacturing	-	11	1	131	3 292	112	239	2 625	4 536	12 640	17 105	D
33995 339950	Sign manufacturing	2	72	7 7	690 690	25 019 25 019	435 435	885 885	12 610 12 610	42 906 42 906	32 179 32 179	74 286 74 286	1 355 1 355
33999	All other miscellaneous manufacturing	1	r63	r12	r1 245	r34 455	1901	r1 796	12 010	r90 705	759 594	r149 380	r3 723
339991	Gasket, packing, and sealing device manufacturing	'	5	2	520	15 442	363	828	6 946	39 321	13 654	52 630	3 723 D
339999	All other miscellaneous manufacturing	2	'51	rg	¹ 683	r18 015	r503	r894	r9 882	r49 165	r43 446	'91 868	D
	manuaciumy		10.	.9	.003	10 015	.503	.094	9 002	49 105	43 446	31 008	<u>U</u>

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.
³Industries with 100 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 100 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: c–100 to 249 employees; 6–250 to 499 employees; 6–100 to 999 employees; 9–1,000 to 2,499 employees, h–2,500 to 4,999 employees; 1–500 to 999 employees; 1–10,000 to 2,499 employees, h–2,500 to 4,999 employees; 1–50,000 to 9,999 employees; 1–10,000 employees or more.

¹Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

For me	aning of abbreviations and symbols, se	e intre											
			establis	ll hments ²	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA												
31-33 311	Manufacturing Food manufacturing	1	2 079 162	592 63	80 535	3 068 561 D	53 635 D	102 911 D	1 626 663 D	9 433 222 D	9 258 424 D	18 724 158 D	571 925 D
3111	Animal food manufacturing		11	6	e	D	D	D	D	D	D	D	D
31111 311119	Animal food manufacturing Other animal food manufacturing	- -	11 10	6 5	e e	D D	D D	D D	D D	D D	D D	D D	D D
3113	Sugar and confectionery product manufacturing	1	23	6	е	D	D	D	D	D	D	D	D
31133	Confectionery manufacturing from purchased chocolate	1	14	3	е	D	D	D	D	D	D	D	D
311330	Confectionery manufacturing from purchased chocolate	1	14	3	е	D	D	D	D	D	D	D	D
3114	Fruit and vegetable preserving and specialty food manufacturing	_	7	4	e	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	-	4	3	е	D	D	D	D	D	D	D	D
3115	Dairy product manufacturing	-	18	9	g	D	D	D	D	D	D	D	D
31151 311511 311514	Dairy product (except frozen) manufacturing Fluid milk manufacturing Dry, condensed, and	-	14 5	5 4	g f	D D	D D	D D	D D	D D	D D	D D	D D
3116	evaporated dairy product manufacturing Animal slaughtering and	-	6	1	е	D	D	D	D	D	D	D	D
	processing	-	17	8	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing	-	17	8	f	D	D	D	D	D	D	D	D
311612	Meat processed from carcasses	-	9	6	е	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	2	65	21	h	D	D	D	D	D	D	D	9 259
31181	Bread and bakery product manufacturing	1	56	19	h	D	D	D	D	D	D	D	D
311811 311812 311813	Retail bakeries Commercial bakeries Frozen cakes, pies, and other pastries	3	32 17	3 9	e g	D	ם	D D	D	D	ם	D	D D
31182	manufacturing Cookie, cracker, and pasta manufacturing	1	7 5	7 2	f e	D D	D D	D D	D D	D D	D D	D D	D D
3119	Other food manufacturing	-	14	5	f	D	D	D	D	D	D	D	D
31199	All other food manufacturing	-	10	2	е	D	D	D	D	D	D	D	D
312	Beverage and tobacco product manufacturing	4	9	5	е	D	D	D	D	D	D	D	D
3121	Beverage manufacturing	4	9	5	е	D	D	D	D	D	D	D	D
31211	Soft drink and ice manufacturing	4		5	е	D	D	D	D.	D	D	D	D
312111 314	Soft drink manufacturing Textile product mills	5	r42	4 r9	e f	D D	D D	D D	D D	D D	D D	D D	D D
3149	Other textile product mills	4	30	9	f	D	D	D	D	D	D	D	D
31491 31499	Textile bag and canvas mills All other textile product mills	4	14 16	4 5	e e	D D	D D	D D	D D	D D	D D	D D	D D
314999	All other miscellaneous textile product mills	5	14	3	е	D	D	D	D	D	D	D	D
315	Apparel manufacturing	-	30	3	f	D	D	D	D	D	D	D	D
3151 31519	Apparel knitting mills	-	3	1	f f	D D	D D	D D	D D	D D	D D	D D	D D
315192	Other apparel knitting mills Underwear and nightwear knitting mills	_	1	1	' f	D	D	D	D	D	D	D	D
3152	Cut and sew apparel manufacturing	1	21	1	e	D	D	D	D	D	D	D	D
321	Wood product manufacturing	2	85	26	g	D	D	D	D	D	D	D	D
3212	Veneer, plywood, and engineered wood product manufacturing	_	10	6	е	D	D	D	D	D	D	D	D
32121	Veneer, plywood, and engineered wood product manufacturing	_	10	6	e	D	D	D	D	D	D	D	D
321214 3219	Truss manufacturing Other wood product manufacturing	2	67	5 20	e g	D D	D D	D D	D D	D D	D D	D D	D D
32191 321918	Millwork	2	42	12	f	D	D	D	D	D	D	D	D
	flooring)	3	27	7	l e	D	l Di	D	l D	D	Dl	D	D

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

FOLINE	aning of abbreviations and symbols, see		Α .	All hments ²	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
322	Paper manufacturing	_	26	14	2 194	80 979	1 832	3 381	61 299	481 853	272 235	758 901	D
3222	Converted paper product manufacturing	_	26	14	2 194	80 979	1 832	3 381	61 299	481 853	272 235	758 901	D
32221	Paperboard container manufacturing	_	11	9	f	D	D	D	D	D	D	D	D
322211	Corrugated and solid fiber box manufacturing	_	5	4	e	D	D	D	D	D	D	D	D
322212	Folding paperboard box manufacturing	_	3	3	e	D	D	D	D	D	D	D	D
32222	Paper bag and coated and treated paper manufacturing	1	6	1	e	D	D	D	D	D	D	D	D
322224	Uncoated paper and multiwall bag manufacturing	_	1	1	e	D	D	D	D	D	D	D	D
32229	Other converted paper product manufacturing	_	6	2	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	224	49	h	D	D	D	D	D	D	D	D
3231	Printing and related support activities	2	224	49	h	D	D	D	D	D	D	D	D
32311	Printing Commercial lithographic	2	199	44	h	D	D	D	D	D	D	D	D
323110	printing	2	82	22	g	D	D	D	D	D	D	D	D
323113 323115	Commercial screen printing Digital printing	2 7	31 12	3	e e	D D	D D	D D	D D	D D	D D	D D	D D
323116	Manifold business forms printing	-	6	4	е	D	D	D	D	D	D	D	D
323118 32312	Blankbook, looseleaf binders, and devices manufacturing . Support activities for printing	2 5	7 25	5 5	438 e	12 908 D	240 D	509 D	7 203 D	20 762 D	19 715 D	39 988 D	379 D
324	Petroleum and coal products manufacturing	_	13	5	f	D	D	D	D	D	D	D	D
3241	Petroleum and coal products manufacturing	_	13	5	f	D	D	D	D	D	D	D	D
32411 324110	Petroleum refineries	_	5 5	4 4	f f	D D	D D	D D	D D	D D	D D	D D	D D
325	Chemical manufacturing	1	84	30	h	D	D	D	D	D	D	D	D
3251	Basic chemical manufacturing	1	11	4	е	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	2	23	14	1 174	43 943	439	816	14 255	277 360	112 036	392 138	D
32541	Pharmaceutical and medicine	_				10.010	400	0.10	44.055	077 000	440.000	202 102	
325412	manufacturing	1	23 17	14 10	1 174 g	43 943 D	439 D	816 D	14 255 D	277 360 D	112 036 D	392 138 D	D D
3256	Soap, cleaning compound, and toilet preparation manufacturing.	_	15	4	g	D	D	D	D	D	D	D	D
32561	Soap and cleaning compound manufacturing		9	2		D	D	D	D	D	D	D	D
325611	Soap and other detergent manufacturing	_	5	1	g f	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	1	17	4	е	D	D	D	D	D	D	D	D
32599	All other chemical product and preparation manufacturing	1	12	3	е	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	3	94	36	h	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	3	83	34	h	D	D	D	D	D	D	D	D
32619	Other plastics product	2	F.4	24		D	D	D	D	D	D	D	D
326191	manufacturing	2	54	3	g	D	D	D	D	D	D	D	D
326199	All other plastics product	_			e								_
327	Manufacturing Nonmetallic mineral product	2	48	21	g	D	D	D	D	D	D	D	D
3271	manufacturing	3	84	28	g	D	D	D	D	D	D	D	D
32712	manufacturing	1	11	2	е	D	D	D	D	D	D	D	D
	refractories manufacturing	1	1 7	2	е	D	D	D	l D	D	D	D	D

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Forme	aning of abbreviations and symbols, see	e mure	Δ	ui I	All em	ployees	Pro	oduction wor	kers				
NAICS			establis		741 0111	picycco		Saudion won	l l				
code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
327 3273	Nonmetallic mineral product manufacturing—Con. Cement and concrete product manufacturing	3	38	20	1 153	41 284	841	1 605	26 508	118 294	118 657	237 542	11 147
32732	Ready-mix concrete												
327320	manufacturing Ready-mix concrete manufacturing	5 5	16 16	9	e e	D D	D D	D D	D D	D D	D D	D D	D D
32733	Concrete pipe, brick, and block manufacturing	2	8	6	e	D	D	D	D	D	D	D	D
32739	Other concrete product manufacturing	2	13	4	332	8 833	229	297	3 940	18 730	11 488	30 548	3 600
327390	Other concrete product manufacturing	2	13	4	332	8 833	229	297	3 940	18 730	11 488	30 548	3 600
3279	Other nonmetallic mineral product manufacturing	5	19	4	е	D	D	D	D	D	D	D	D
32799	All other nonmetallic mineral product manufacturing	5	18	3	е	D	D	D	D	D	D	D	D
331 3311	Primary metal manufacturing Iron and steel mills and ferroalloy	-	r30	r14	h	D	D	D	D	D	D	D	D
33111	manufacturing	-	2	1	е	D	D	D	D	D	D	D	D
331111	ferroalloy manufacturing Iron and steel mills	_	2 2	1 1	e e	D D	D D	D D	D D	D D	D D	D D	D D
3313	Alumina and aluminum production and processing	_	5	2	е	D	D	D	D	D	D	D	D
33131	Alumina and aluminum production and processing	_	5	2	е	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production and processing	_	13	6	g	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting and				9								D
331411	refining Primary smelting and refining	-	5	4	f	D	D	D	D	D	D	D	D
331419	of copper Primary smelting and refining of nonferrous metal (except	_	2	2	f	D	D	D	D	D	D	D	D
33149	copper and aluminum) Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and	1	3	2	е	D	D	D	D	D	D	D	D
331491	alloying Nonferrous metal (except copper and aluminum) rolling, drawing, and	-	6	1	е	D	D	D	D	D	D	D	D
3315	extruding	_	3 9	1 4	e f	D D	D D	D D	D D	D D	D D	D D	D D
33152	Nonferrous metal foundries	_	7	3	e	D	D	D	D	D	D	D	D
331524	Aluminum foundries (except die-casting)	-	3	2	е	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	r387	r93	^r 7 422	r270 022	r5 329	r10 173	r168 811	r582 630	r475 472	r1 069 619	r23 031
3321	Forging and stamping	-	10	4	е	D	D	D	D	D	D	D	D
33211 332116	Forging and stamping Metal stamping	_	10 3	4 3	e e	D D	D D	D D	D D	D D	D D	D D	D D
3323	Architectural and structural metals manufacturing	1	134	42	3 534	138 541	2 451	4 885	82 003	296 400	305 798	602 863	13 445
33231	Plate work and fabricated structural product manufacturing	_	58	19	g	D	D	D	D	D	D	D	D
332311	Prefabricated metal building and component												D
332312	manufacturing Fabricated structural metal manufacturing	_	8 44	3 16	e g	D D	D D	D D	D D	D D	D D	D D	D
33232	Ornamental and architectural metal products manufacturing	1	76	23	g	D	D	D	D	D	D	D	D
332321	Metal window and door manufacturing	_	5	4	e	D	D	D	D	D	D	D	D
332322	Sheet metal work manufacturing	1	46	14	1 031	38 246	776	1 730	24 776	67 662	58 159	126 853	D
332323	Ornamental and architectural metal work manufacturing	2	25	5	е	D	D	D	D	D	D	D	D
3324	Boiler, tank, and shipping container manufacturing	_	7	5	f	D	D	D	D	D	D	D	D
33242	Metal tank (heavy gauge) manufacturing	_	6	4	e	D	D	D	D	D	D	D	D
332420	Metal tank (heavy gauge) manufacturing	_	6	4	e	D	D	D	D	D	D	D	D

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Forme	aning of abbreviations and symbols, see	e mur	A establish	JI I	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
332 3327	Fabricated metal product manufacturing—Con. Machine shops; turned product; and screw, nut, and bolt manufacturing	3	135	22	1 168	41 706	876	1 583	28 008	81 741	34 817	117 998	3 774
33271 332710	Machine shops	3	124 124	20 20	1 035 1 035	36 491 36 491	798 798	1 429 1 429	25 565 25 565	73 271 73 271	30 658 30 658	103 281 103 281	D D
3328	Coating, engraving, heat treating, and allied activities	1	31	8	e	D	D	D	D	D	D	D	D
33281	Coating, engraving, heat treating, and allied activities	1	31	8	e	D	D	D	D	D	D	D	D
3329	Other fabricated metal product manufacturing	1	47	9	g	D	D	D	D	D	D	D	D
33291 332912	Metal valve manufacturing Fluid power valve and hose	_	3	2	f	D	D	D	D	D	D	D	D
33299	fitting manufacturing All other fabricated metal	-	1	1	f	D	D	D	D	D	D	D	D
	product manufacturing	2	44	7	f	D	D	D	D	D	D	D	D
333 3331	Machinery manufacturing Agriculture, construction, and	_	r101	r29	h	D	D	D	D	D	D	D	D
	mining machinery manufacturing	3	12	4	е	D	D	D	D	D	D	D	D
33313	Mining and oil and gas field machinery manufacturing	3	8	3	е	D	D	D	D	D	D	D	D
3332	Industrial machinery manufacturing	_	18	6	f	D	D	D	D	D	D	D	D
33329	Other industrial machinery manufacturing	_	15	6	f	D	D	D	D	D	D	D	D
333298	All other industrial machinery manufacturing	-	7	4	е	D	D	D	D	D	D	D	D
3333	Commercial and service industry machinery manufacturing	1	r20	r6	f	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery			_		_	_	_	_	_	_	_	_
333319	manufacturing	1	r20	^r 6	f	D	D	D	D	D	D	D	D
3334	manufacturing Ventilation, heating, air-	1	r10	r5	f	D	D	D	D	D	D	D	D
	conditioning, and commercial refrigeration equipment manufacturing	_	8	3	e	D	D	D	D	D	D	D	D
33341	Ventilation, heating, air- conditioning, and commercial refrigeration equipment												
3336	manufacturing Engine, turbine, and power	_	8	3	е	D	D	D	D	D	D	D	D
	transmission equipment manufacturing	-	2	1	е	D	D	D	D	D	D	D	D
33361	Engine, turbine, and power transmission equipment			4		D	D	D	D	D	D	D	D
333618	manufacturing Other engine equipment manufacturing	_	2	1	e e	D	D	D	D	D	D	D	D
3339	Other general purpose machinery manufacturing	_	17	8	g	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing	_	10	4	g	D	D	D	D	D	D	D	D
333994	Industrial process furnace and oven manufacturing	_	1	1	e	D	D	D	D	D	D	D	D
333995	Fluid power cylinder and actuator manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	1	105	40	10 075	484 320	4 953	10 759	166 200	1 041 233	758 440	1 880 480	D
3341	Computer and peripheral equipment manufacturing	-	12	3	f	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	_	12	3	f	D	D	D	D	D	D	D	D
334111	Electronic computer manufacturing	_	4	2	f	D	D	D	D	D	D	D	D

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For me	aning of abbreviations and symbols, see	e intro	A establis	JI	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
334 3342	Computer and electronic product manufacturing—Con. Communications equipment manufacturing		11	4	f	D	D	D	D	D	D	D	D
33422	Radio and television broadcasting and wireless communications equipment		.,			b	J	J	D	J	J	J	D
334220	manufacturing	-	6	2	е	D	D	D	D	D	D	D	D
33429	manufacturing Other communications	_	6	2	е	D	D	D	D	D	D	D	D
334290	equipment manufacturing Other communications	_	1	1	е	D	D	D	D	D	D	D	D
	equipment manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	_	34	13	g	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing		34	13	a	D	D	D	D	D	D	D	D
334412	Bare printed circuit board manufacturing		12	4	g f	D	D	D	D	D	D	D	D
334413	Semiconductor and related device manufacturing	_	4	1	e	D	D	D	D	D	D	D	D
334419	Other electronic component manufacturing	1	13	8	f	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	1	31	13	i	D	D	D	D	D	D	D	D
33451	Navigational, measuring,												
334510	electromedical, and control instruments manufacturing Electromedical and electrotherapeutic	1	31	13	i	D	D	D	D	D	D	D	D
334511	apparatus manufacturing	5	9	6	h	D	D	D	D	D	D	D	D
334517	system and instrument manufacturing Irradiation apparatus	-	5	2	g	D	D	D	D	D	D	D	D
	manufacturing	-	3	2	f	D	D	D	D	D	D	D	D
3346	Manufacturing and reproducing magnetic and optical media	3	9	4	е	D	D	D	D	D	D	D	D
33461 334612	Manufacturing and reproducing magnetic and optical media Prerecorded compact disc (except software), tape, and	3	9	4	е	D	D	D	D	D	D	D	D
335	record reproducing Electrical equipment, appliance, and	3	7	3	288	8 053	210	403	4 831	23 052	11 070	34 182	3 406
	component manufacturing	2	30	12	1 123	43 358	709	1 315	19 503	157 437	167 052	321 969	D
3353	Electrical equipment manufacturing	7	13	4	е	D	D	D	D	D	D	D	D
33531	Electrical equipment manufacturing	7	13	4	е	D	D	D	D	D	D	D	D
3359	Other electrical equipment and component manufacturing	_	13	8	f	D	D	D	D	D	D	D	D
33599	All other electrical equipment and component manufacturing	_	10	6	f	D	D	D	D	D	D	D	D
335991	Carbon and graphite product manufacturing All other miscellaneous	_	3	2	е	D	D	D	D	D	D	D	3 127
335999	All other miscellaneous electrical equipment and component manufacturing	2	7	4	е	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	_	74	26	j	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	_	13	5	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer												
336212	manufacturing Truck trailer manufacturing	_	13 2	5 1	f e	D D	D D	D D	D D	D D	D D	D D	D D
3363	Motor vehicle parts manufacturing	-	33	13	i	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts manufacturing	_	18	12	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing	_	18	12	h	D	D	D	D	D	D	D	D

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	laning of abbreviations and symbols, see		establis	JI	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
336 3364	Transportation equipment manufacturing—Con. Aerospace product and parts manufacturing	_	14	8	i	D	D	D	D	D	D	D	D
33641	Aerospace product and parts		14	8		D	D	D	D	D	D	D	D
336412	manufacturing	_	3	2	f	D	D	D	D	D	D	D	D
336415	Guided missile and space vehicle propulsion unit and			_	·								
	propulsion unit parts manufacturing	_	3	3	h	D	D	D	D	D	D	D	D
337	Furniture and related product	1	199	48		D	D	D	D	D	D	D	D
3371	manufacturing Household and institutional	'	199	40	'	D		D			ا	D	D
	furniture and kitchen cabinet manufacturing	1	158	29	h	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet and countertop manufacturing	3	98	20	g	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet and countertop manufacturing	3	98	20	g	D	D	D	D	D	D	D	D
33712 337121	Household and institutional furniture manufacturing Upholstered household	1	60	9	g	D	D	D	D	D	D	D	D
337122	furniture manufacturing Nonupholstered wood	-	15	4	g	D	D	D	D	D	D	D	D
	household furniture manufacturing	2	36	4	е	D	D	D	D	D	D	D	D
3372	Office furniture (including fixtures) manufacturing	1	25	10	f	D	D	D	D	D	D	D	D
33721	Office furniture (including fixtures) manufacturing	1	25	10	f	D	D	D	D	D	D	D	D
337212	Custom architectural woodwork and millwork manufacturing	_	12	5	е	D	D	D	D	D	D	D	D
337215	Showcase, partition, shelving, and locker manufacturing	1	9	4	е	D	D	D	D	D	D	D	D
3379	Other furniture related product manufacturing	_	16	9	g	D	D	D	D	D	D	D	D
33791	Mattress manufacturing	_	10	6	e	D	D	D	D	D	D	D	D
337910 33792	Mattress manufacturing Blind and shade	-	10	6	e	D	D	D	D	D	D	D	D
337920	manufacturing Blind and shade manufacturing	_	6	3	f	D D	D D	D D	D D	D D	D D	D D	D D
339 3391	Miscellaneous manufacturing Medical equipment and supplies	2	280	61	J	D	D	D	D	D	D	D	D
33911	manufacturing	2	126	32	i	D	D	D	D	D	D	D	D
339112	supplies manufacturing Surgical and medical	2	126	32	i	D	D	D	D	D	D	D	D
339113	instrument manufacturing Surgical appliance and	2	17	14	h	D	D	D	D	D	D	D	D
339114	supplies manufacturing Dental equipment and supplies manufacturing	2	17	11	g	D D	D D	D D	D D	D D	D D	D D	D D
339115	Ophthalmic goods manufacturing	_	14	3	e	D	D	D	D	D	D	D	D
339116	Dental laboratories	1	70	3	f	Ď	Ď	Ď	Ď	Ď	Ď	Ď	Ď
3399	Other miscellaneous manufacturing	1	154	29	i	D	D	D	D	D	D	D	D
33991	Jewelry and silverware manufacturing	_	19	2	g	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) manufacturing	_	14	1	g	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods manufacturing	1	30	12	h	D	D	D	D	D	D	D	D
339920 33995	Sporting and athletic goods manufacturing Sign manufacturing	1	30 49	12	h e	D D	D D	D D	D D	D D	D D	D D	D D
339950 33999	Sign manufacturing All other miscellaneous	1	49	4	e	D	D	D D	D	D	D	D	D
339991	manufacturing	1 -	42	11	g f	D	D	D D	D	D	D	D	D D
339999	All other miscellaneous manufacturing			8	e	D	D	D	D	D	D	D	D

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For me	eaning of abbreviations and symbols, sec	e intr											
			establisl	lli hments ²	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
	Brigham City, UT Micropolitan Statistical Area												
31-33	Manufacturing	_	60	19	7 807	359 674	4 957	9 363	184 514	974 430	831 063	1 808 989	39 498
331	Primary metal manufacturing	-	2	1	е	D	D	D	D	D	D	D	D
3311	Iron and steel mills and ferroalloy manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
33111 331111	Iron and steel mills and ferroalloy manufacturing Iron and steel mills	_	1 1	1	e e	D D	D D	D D	D D	D D	D D	D D	D D
332	Fabricated metal product manufacturing		14	6	575	22 800	428	783	17 351	45 294	66 944	112 651	1 603
3323	Architectural and structural metals manufacturing		6	4	509	20 884	373	663	15 909	41 489	58 705	100 570	1 517
33231	Plate work and fabricated												
332312	structural product manufacturing Fabricated structural metal	-	4	3	е	D	D	D	D	D	D	D	D
336	manufacturing Transportation equipment manufacturing	_	4	2	e i	D D	D D	D D	D D	D D	D D	D D	D D
3363	Motor vehicle parts manufacturing		3	3	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts												
336399	manufacturing	_	3	3	g g	D D	D D	D D	D D	D D	D D	D D	D D
3364	Aerospace product and parts manufacturing	_	1	1	h	D	D	D	D	D	D	D	D
33641 336415	Aerospace product and parts manufacturing Guided missile and space vehicle propulsion unit and propulsion unit parts	-	1	1	h	D	D	D	D	D	D	D	D
	manufacturing	-	1	1	h	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	-	7	1	g	D	D	D	D	D	D	D	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	_	7	1	g	D	D	D	D	D	D	D	D
33712	Household and institutional					_	_	_	_		_	_	
337121	furniture manufacturing Upholstered household furniture manufacturing	_	1	1	g g	D D	D D	D D	D D	D D	D D	D D	D D
	Ogden-Clearfield, UT Metropolitan Statistical Area												
31-33	Manufacturing	1	517	149	21 850	736 751	16 569	30 901	481 602	2 727 115	3 046 986	5 750 104	178 861
311	Food manufacturing		39	20	2 987	96 243	2 091	3 638	57 169	450 321	431 410	884 518	18 013
3115	Dairy product manufacturing	1	6	4	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen)					_	_	_	_		_	_	
311514	manufacturing Dry, condensed, and evaporated dairy product manufacturing	_	2	1	e e	D D	D D	D D	D D	D D	D D	D D	1 588 D
3118	Bakeries and tortilla manufacturing	1	12	6	g	D	D	D	D	D	D	D	3 375
31181	Bread and bakery product	ļ .	'2	O	9	D						D	0 0/0
311812 311813	manufacturing Commercial bakeries Frozen cakes, pies, and other pastries	_	11 2	5 2	g f	D D	D D	D D	D D	D D	D D	D D	D D
201	manufacturing	-	20	2		D D	D D	D D	D D	D D	D D	D D	D D
321 322	Wood product manufacturing Paper manufacturing	1 -	6	6 4	966	37 640	815	1 262	29 723	379 399	147 510	533 097	15 819
3222	Converted paper product manufacturing	_	6	4	966	37 640	815	1 262	29 723	379 399	147 510	533 097	15 819
32229	Other converted paper product							5				5	-
322291	manufacturing	_	1	1	f.	D D	D D	D D	D D	D D	D D	D D	D D

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	aning of abbreviations and symbols, see	7 11 11 1	A establish	<u>,</u> JI	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con. Ogden-Clearfield, UT												
	Metropolitan Statistical Area —Con.												
323	Printing and related support activities	1	44	8	479	13 356	358	568	8 792	33 708	17 357	51 026	D
3231	Printing and related support activities	1	44	8	479	13 356	358	568	8 792	33 708	17 357	51 026	D
32311 323110	Printing Commercial lithographic printing	1	41 22	7	e e	D D	D D	D D	D D	D D	D D	D D	D D
324	Petroleum and coal products manufacturing	_	8	3	е	D	D	D	D	D	D	D	D
3241	Petroleum and coal products manufacturing	_	8	3	e	D	D	D	D	D	D	D	D
32411 324110	Petroleum refineries	-	3 3	2 2	е	D	D D	D	D	D	D	D	D
325	Petroleum refineries	2	29	9	e 613	19 204	243	519	7 207	138 300	74 983	215 014	3 449
3254	Pharmaceutical and medicine manufacturing	2	13	7	435	14 337	188	394	5 330	119 637	57 224	178 358	D
32541 325412	Pharmaceutical and medicine manufacturing	2	13	7	435	14 337	188	394	5 330	119 637	57 224	178 358	D
	manufacturing	1	10	5	е	D	D	D	D	D	D	D	1 814
326	Plastics and rubber products manufacturing	5	21	10	505	13 551	402	745	9 240	50 772	45 598	92 322	6 744
3261 32619	Plastics product manufacturing Other plastics product	5	20	10	f	D	D	D	D	D	D	D	6 744
327	manufacturing Nonmetallic mineral product	5	12	6	272	6 821	239	458	5 018	22 764	13 391	33 547	1 815
3273	manufacturing	2	17	6	443	14 547	337	617	9 916	43 147	42 015	86 041	2 574
3273	Cement and concrete product manufacturing	2	9	4	329	11 136	247	455	7 740	37 287	36 883	74 771	2 056
331	Primary metal manufacturing	-	4	4	g	D	D	D	D	D	D	D	3 174
3313	Alumina and aluminum production and processing	-	2	2	е	D	D	D	D	D	D	D	D
33131	Alumina and aluminum production and processing	-	2	2	е	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production and processing	_	1	1	e	D	D	D	D	D	D	D	D
33149	Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying	I	1	1	e	D	D	D	D	D	D	D	D
	copper and aluminum) rolling, drawing, and extruding	_	1	1	е	D	D	D	D	D	D	D	D
3315	Foundries	_	1	1	e	D	D	D	D	D	D	D	D
33152 331524	Nonferrous metal foundries Aluminum foundries (except die-casting)	-	1	1	e e	D D	D D	D D	D D	D D	D D	D D	D D
332	Fabricated metal product manufacturing	1	119	29	2 552	93 453	1 889	3 638	58 727	204 510	177 832	388 331	8 820
3323	Architectural and structural metals manufacturing	-	35	15	1 460	57 990	1 015	2 200	33 486	128 187	121 229	250 983	5 225
33231	Plate work and fabricated structural product												
332312	manufacturing Fabricated structural metal manufacturing	_	14 12	6	768 f	32 194 D	490 D	985 D	17 059 D	81 661 D	84 765 D	167 169 D	925 D
33232	Ornamental and architectural metal products manufacturing	1	21	9	692	25 796	525	1 215	16 427	46 526	36 464	83 814	4 300
332322	Sheet metal work manufacturing	1	17	8	650	24 655	486	1 123	15 407	43 853	34 669	79 346	4 300 D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	3	42	2	267	8 682	207	352	5 954	17 564	8 110	25 629	962
3329	Other fabricated metal product manufacturing	_	15	4	294	10 610	240	521	8 084	33 593	21 387	57 885	1 292
33299	All other fabricated metal product manufacturing		14	3	e	D	D	D	D	D	D D	D.	D

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NAICS code	Geographic area and industry	E ¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
	Ogden-Clearfield, UT Metropolitan Statistical Area —Con.												
333	Machinery manufacturing	-	^r 18	r6	^r 1 573	¹ 58 318	^r 1 074	r2 158	r33 989	^r 125 821	r101 079	r228 699	'7 051
3332	Industrial machinery manufacturing	-	3	1	е	D	D	D	D	D	D	D	D
33329 333298	Other industrial machinery manufacturingAll other industrial machinery manufacturing	-	2	1	e e	D D	D D	D D	D D	D D	D D	D D	D D
3339	Other general purpose machinery manufacturing	_	5	3	g	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing		4	2	g	D	D	D	D	D	D	D	D
333994	Industrial process furnace and oven manufacturing	_	1	1	e e	D	D	D	D	D	D	D	D
333995	Fluid power cylinder and actuator manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	8	15	4	1 363	55 570	1 033	3 065	29 262	113 317	130 239	244 415	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	9	4	2	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control												
334510	instruments manufacturing Electromedical and electrotherapeutic	9	4	2	g	D	D	D	D	D	D	D	D
335	apparatus manufacturing Electrical equipment, appliance, and	9	2	2	g	D	D	D	D	D	D	D	D
336	component manufacturing Transportation equipment	3	7	3	287	11 941	256	346	5 818	56 802	73 394	128 897	D
	manufacturing	-	30	16	3 838	129 740	3 244	4 921	99 737	588 606	867 416	1 441 793	44 104
3362	Motor vehicle body and trailer manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
33621 336212	Motor vehicle body and trailer manufacturing	- -	6 1	3 1	f e	D D	D D	D D	D D	D D	D D	D D	D D
3363	Motor vehicle parts manufacturing	_	12	9	h	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts manufacturing	_	8	8	h	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing	-	8	8	h	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	_	7	4	е	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	_	7	4	е	D	D	D	D	D	D	D	D
336412	Aircraft engine and engine parts manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	2	42	7	995	23 200	756	913	12 597	48 611	35 253	84 532	D
3371	Household and institutional furniture and kitchen cabinet manufacturing	3	35	4	e	D	D	D	D	D	D	D	D
33711	Wood kitchen cabinet and countertop manufacturing	2	24	3	е	D	D	D	D	D	D	D	D
337110	Wood kitchen cabinet and countertop manufacturing	2	24	3	е	D	D	D	D	D	D	D	D
3379	Other furniture related product manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
33792	Blind and shade manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
337920	Blind and shade manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	1	70	10	3 190	87 210	2 654	5 673	68 252	271 489	157 032	426 204	13 474
3391	Medical equipment and supplies manufacturing	1	31	3	583	13 263	478	855	8 762	26 914	14 397	40 837	958
33911 339115	Medical equipment and supplies manufacturing Ophthalmic goods manufacturing	1 -	31	3	583 e	13 263 D	478 D	855 D	8 762 D	26 914 D	14 397 D	40 837 D	958 D

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

For me	aning of abbreviations and symbols, sec	e intre											
			establis	hments ²	All em	ployees	Pro	oduction work	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
	Ogden-Clearfield, UT Metropolitan Statistical Area - Con.												
339 3399	Miscellaneous manufacturing—Con. Other miscellaneous manufacturing	1	39	7	2 607	73 947	2 176	4 818	59 490	244 575	142 635	385 367	12 516
33992 339920	Sporting and athletic goods manufacturing	1	7	4	2 380 2 380	67 080 67 080	2 011 2 011	4 519 4 519	55 882 55 882	231 564 231 564	135 166 135 166	364 742 364 742	12 243 12 243
	manufacturing Salt Lake City, UT Metropolitan Statistical Area	ľ	,	4	2 300	07 000	2 011	4 319	33 862	231 304	133 100	304 742	12 240
31-33	Manufacturing	1	1 502	424	50 878	1 972 136	32 109	62 647	960 547	5 731 677	5 380 375	11 165 065	353 566
311	Food manufacturing	1	116	40	4 120	123 088	2 740	5 336	67 011	475 198	537 472	1 011 417	28 767
3113	Sugar and confectionery product manufacturing	-	20	6	475	11 248	372	590	7 086	30 673	22 960	53 119	810
31133	Confectionery manufacturing from purchased chocolate	_	11	3	268	5 638	219	320	3 813	16 314	11 624	27 411	D
311330	Confectionery manufacturing from purchased chocolate	_	11	3	268	5 638	219	320	3 813	16 314	11 624	27 411	D
3115	Dairy product manufacturing	-	12	5	694	26 966	389	890	14 066	96 498	219 404	315 872	12 203
31151	Dairy product (except frozen) manufacturing	_	10	3	f	D	D	D	D	D	D	D	D
311511 3116	Fluid milk manufacturing Animal slaughtering and	-	4	3	597	22 948	318	744	11 278	87 692	126 782	214 582	D
	processing	-	9	5	510	14 263	445	969	10 798	46 891	128 202	175 080	4 352
31161 311612	Animal slaughtering and processing	-	9	5	510	14 263	445	969	10 798	46 891	128 202	175 080	4 352
3118	carcasses	_	6	4	е	D	D	D	D	D	D	D	D
31181	manufacturing	3	53	15	g	D D	D D	D D	D D	D D	D D	D D	5 884 D
311812 311813	manufacturing Commercial bakeries Frozen cakes, pies, and other pastries	3 4	45 15	14 7	g f	D	D	D	Б	D	D	D	D
3119	manufacturing Other food manufacturing	2	5 10	5 4	e 442	D 12 730	D 270	D 570	D 6 682	D 126 629	D 70 607	D 196 776	D 3 893
312	Beverage and tobacco product												
3121	manufacturing Beverage manufacturing	5 5	7 7	4	e e	D D	D D	D D	D D	D D	D D	D D	D D
31211	Soft drink and ice		′	-	6			D		D	D	D	D
312111	manufacturing	5 5	4 3	4 3	e e	D D	D D	D D	D D	D D	D D	D D	D D
314	Textile product mills	5	28	7	f	D	D	D	D	D	D	D	D
3149	Other textile product mills	5	20	7	е	D	D	D	D	D	D	D	D
31499 314999	All other textile product mills All other miscellaneous textile		9	3	е	D	D	D	D	D	D	D	105
315	product mills	4	9 22	3	e •	D D	D D	D D	D D	D D	D D	D D	105 D
3151	Apparel knitting mills	_	22	1	f	D	D	D	D	D	D	D	D
31519 315192	Other apparel knitting mills Underwear and nightwear	-	2	1	f	D	D	D	D	D	D	D	D
3152	knitting mills Cut and sew apparel	-	1	1	f	D	D	D	D	D	D	D	D
	manufacturing	1	15	1	е	D	D	D	D	D	D	D	D
321 3212	Wood product manufacturing Veneer, plywood, and engineered	1	60	20	1 114	31 704	893	1 677	21 806	58 109	62 681	119 601	1 821
32121	wood product manufacturing	-	6	5	265	8 428	216	446	6 630	14 834	14 553	29 180	D
3 <u>21</u> 21	Veneer, plywood, and engineered wood product manufacturing	_	6	5	265	8 428	216	446	6 630	14 834	14 553	29 180	D
3219	Other wood product manufacturing	2	51	15	817	22 639	649	1 195	14 649	41 584	47 260	87 909	1 474
32191 321918	Millwork	2	34	9	545	15 742	424	789	9 792	27 246	34 689	61 216	791
021310	flooring)	3	23	6	302	10 029	221	441	5 538	17 059	23 951	40 621	434

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

For me	eaning of abbreviations and symbols, see	e intre	oductory to										
			establis	hments ²	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E ¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
	Salt Lake City, UT Metropolitan Statistical Area -Con.												
322	Paper manufacturing	-	20	10	1 228	43 339	1 017	2 119	31 576	102 454	124 725	225 804	D
3222	Converted paper product manufacturing	-	20	10	1 228	43 339	1 017	2 119	31 576	102 454	124 725	225 804	D
32221	Paperboard container manufacturing	_	8	7	f	D	D	D	D	D	D	D	D
322211	Corrugated and solid fiber box manufacturing	_	3	3	е	D	D	D	D	D	D	D	D
322212 32222	Folding paperboard box manufacturing	_	2	2	е	D	D	D	D	D	D	D	D
322224	Paper bag and coated and treated paper manufacturing Uncoated paper and multiwall	1	6	1	е	D	D	D	D	D	D	D	D
	bag manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	178	40	3 495	114 554	2 551	4 817	72 083	341 839	157 505	499 920	16 122
3231	Printing and related support activities	2	178	40	3 495	114 554	2 551	4 817	72 083	341 839	157 505	499 920	16 122
32311 323110	Printing Commercial lithographic	2	156	36	3 234	107 719	2 340	4 425	67 407	328 936	153 515	482 965	15 575
323113	printing	3 2 7	59 25	15 4	1 259 427	44 962 11 247	991 344	1 908 537	30 951 6 664	107 122 19 507	67 060 12 147	174 509 32 436	8 307 D
323115 323116	Digital printing	7	11	3	е	D	D	D	D _	D	D	D _	D
323118	printing Blankbook, looseleaf binders, and devices manufacturing .	-	5 7	5	e 438	D 12 908	D 240	D 509	7 203	D 20 762	D 19 715	D 39 988	D 379
32312	Support activities for printing	2 5	22	4	261	6 835	211	392	4 676	12 903	3 990	16 955	547
324	Petroleum and coal products manufacturing	-	5	2	е	D	D	D	D	D	D	D	D
3241	Petroleum and coal products manufacturing	_	5	2	е	D	D	D	D	D	D	D	D
32411	Petroleum refineries	_	2 2	2 2	е	D D	D D	D D	D D	D D	D D	D D	D D
324110 325	Petroleum refineries Chemical manufacturing	1	53	21	e 2 716	113 776	1 390	2 586	47 184	481 208	312 519	794 921	27 663
3251	Basic chemical manufacturing	1	9	4	314	15 014	174	342	6 353	51 928	38 386	89 539	D
3254	Pharmaceutical and medicine manufacturing	2	10	7	739	29 606	251	422	8 925	157 723	54 812	213 780	8 224
32541	Pharmaceutical and medicine manufacturing	2	10	7	739	29 606	251	422	8 925	157 723	54 812	213 780	8 224
325412	Pharmaceutical preparation manufacturing	1	7	5	f	D	D	D	D	D	D	D	D
3256	Soap, cleaning compound, and toilet preparation manufacturing.	_	9	2	g	D	D	D	D	D	D	D	D
32561	Soap and cleaning compound manufacturing	_	6	1	f	D	D	D	D	D	D	D	D
325611	Soap and other detergent manufacturing	_	4	1	f	D	D	D	D	D	D	D	D
3259	Other chemical product and preparation manufacturing	_	14	4	334	15 226	263	539	10 708	80 083	27 528	106 957	3 867
32599	All other chemical product and preparation manufacturing	1	9	3	е	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	3	68	24	2 181	67 530	1 749	3 397	45 700	183 745	134 999	289 315	7 901
3261	Plastics product manufacturing	3	58	22	g	D	D	D	D	D	D	D	D
32619	Other plastics product manufacturing	1	38	17	1 751	52 456	1 411	2 725	35 450	110 993	85 975	195 720	5 339
326191	Plastics plumbing fixture manufacturing	-	4	2	322	7 488	274	492	5 356	8 598	15 879	24 079	1 052
326199	All other plastics product manufacturing	2	34	15	1 429	44 968	1 137	2 233	30 094	102 395	70 096	171 641	4 287
327	Nonmetallic mineral product manufacturing	3	66	22	1 363	49 658	996	1 993	31 757	130 607	108 620	238 561	12 489
3273	Cement and concrete product manufacturing	4	29	16	824	30 148	594	1 150	18 768	81 007	81 774	162 771	9 091
32732	Ready-mix concrete manufacturing	5	14	8	366	14 560	305	659	11 404	47 534	45 127	92 730	4 575
327320	Ready-mix concrete manufacturing	5	14	8	366	14 560	305	659	11 404	47 534	45 127	92 730	4 575
32739	Other concrete product manufacturing	3	9	3	257	7 386	173	242	3 357	12 054	10 044	22 462	3 524
327390	Other concrete product manufacturing	3	9	3	257	7 386	173	242	3 357	12 054	10 044	22 462	3 524

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1011116	eaning of abbreviations and symbols, see	e intro			All em	ployees	Pro	oduction wor	kers				
NAICS	Coorresphia area and industry		establis	With 20		. ,							Total
code	Geographic area and industry	E¹	Total	em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
	Salt Lake City, UT Metropolitan Statistical Area -Con.												
331	Primary metal manufacturing	-	^r 24	r9	^r 1 222	r47 988	^r 987	^r 2 110	'37 257	r538 678	¹ 746 004	r1 300 081	r17 443
3314	Nonferrous metal (except aluminum) production and processing	_	11	5	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting and												
331411	refining	-	5	4	f	D	D	D	D	D	D	D	D
331419	of copper	1	3	2	f e	D D	D D	D D	D D	D D	D D	D D	D D
332	Fabricated metal product manufacturing	1	^r 254	¹ 58	r4 295	^r 153 769	'3 012	^r 5 752	r92 733	r332 826	r230 696	^r 568 637	r12 608
3321	Forging and stamping	-	6	3	327	9 257	155	332	3 746	16 005	30 532	49 379	D
33211 332116	Forging and stamping Metal stamping	- -	6 2	3 2	327 e	9 257 D	155 D	332 D	3 746 D	16 005 D	30 532 D	49 379 D	D D
3323	Architectural and structural metals manufacturing	1	93	23	1 565	59 667	1 063	2 022	32 608	126 724	125 864	251 310	6 703
33231	Plate work and fabricated structural product manufacturing	1	40	10	632	21 121	473	907	13 802	56 716	62 743	117 430	4 180
332312 33232	Fabricated structural metal manufacturing Ornamental and architectural	2	30	8	е	D	D	D	D	D	D	D	2 549
	metal products manufacturing	1	53	13	933	38 546	590	1 115	18 806	70 008	63 121	133 880	2 523
332321 332322	Metal window and door manufacturing	_	4	4	е	D	D	D	D	D	D	D	D
3324	manufacturing Boiler, tank, and shipping	1	29	6	381	13 591	290	607	9 369	23 809	23 490	47 507	609
	container manufacturing	_	5	3	е	D	D	D	D	D	D	D	D
33242 332420	Metal tank (heavy gauge) manufacturing Metal tank (heavy gauge) manufacturing	_ _	5 5	3	e e	D D	D D	D D	D D	D D	D D	D D	D D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	3	89	20	896	32 874	664	1 224	21 950	63 884	26 573	91 942	2 799
33271 332710	Machine shops	3	82 82	18 18	792 792	28 626 28 626	608 608	1 115 1 115	20 208 20 208	57 452 57 452	23 320 23 320	80 138 80 138	2 358 2 358
3329	Other fabricated metal product manufacturing	1	30	4	795	27 321	593	1 124	17 176	78 739	12 777	91 268	1 824
33291 332912	Metal valve manufacturing Fluid power valve and hose	-	2	1	f	D	D	D	D	D	D	D	D
333	fitting manufacturing	1	81	23	f 3 025	D 128 873	D 1 738	D 3 448	D 59 297	D 296 005	D 236 395	D 528 647	D 16 075
3331	Agriculture, construction, and mining machinery manufacturing	3	9	3	285	8 846	162	269	4 620	23 420	33 301	56 192	D
3332	Industrial machinery manufacturing	_	14	5	261	9 784	155	263	4 538	20 646	14 807	34 665	D
33329	Other industrial machinery			5		D	D	D		D	D	D	D
3333	manufacturing Commercial and service industry machinery manufacturing	1	12	5	e f	D	D	D	D D	D	D	D	1 790
33331	Commercial and service industry machinery												
333319	manufacturing Other commercial and service industry machinery	1	19	5	f	D	D	D	D	D	D	D	1 790
3334	manufacturing Ventilation, heating, air- conditioning, and commercial	1	9	4	f	D	D	D	D	D	D	D	D
	refrigeration equipment manufacturing	_	6	3	347	9 596	281	523	6 057	30 954	26 174	57 050	2 241
33341	Ventilation, heating, air- conditioning, and commercial refrigeration equipment manufacturing	_	6	3	347	9 596	281	523	6 057	30 954	26 174	57 050	2 241

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

		A	JI	All am	alavaaa	D.						
		establis	nments ²	All em	ployees	Pri	oduction work	kers				
Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
Salt Lake City, UT Metropolitan Statistical Area -Con.												
Machinery manufacturing—Con. Engine, turbine, and power transmission equipment manufacturing	_	2	1	e	D	D	D	D	D	D	D	D
Engine, turbine, and power transmission equipment					_	_	_	_	_	_	_	_
manufacturing Other engine equipment manufacturing	_	2	1	e e	D D	D D	D D	D D	D D	D D	D D	D D
Other general purpose machinery manufacturing	_	11	5	803	39 749	344	747	13 196	71 960	52 412	122 540	D
All other general purpose machinery manufacturing	_	5	2	f	D	D	D	D	D	D	D	D
Fluid power cylinder and actuator manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
Computer and electronic product manufacturing	_	90	36	8 712	428 750	3 920	7 694	136 938	927 916	628 201	1 636 065	45 528
Computer and peripheral equipment manufacturing	_	9	3	730	40 284	126	234	4 394	72 898	61 465	138 394	D
Computer and peripheral equipment manufacturing	_	9	3	730	40 284	126	234	4 394	72 898	61 465	138 394	D
manufacturing	_	4	2	f	D	D	D	D	D	D	D	D
manufacturing	_	10	4	822	37 671	300	378	9 113	51 797	37 201	85 712	D
Radio and television broadcasting and wireless communications equipment manufacturing Radio and television broadcasting and wireless	_	5	2	е	D	D	D	D	D	D	D	D
communications equipment manufacturing	_	5	2	е	D	D	D	D	D	D	D	D
equipment manufacturing Other communications	_	1	1	е	D	D	D	D	D	D	D	D D
Semiconductor and other electronic component					65 472				121 250		219 917	D
Semiconductor and other												
manufacturing	-	29	11	1 770	65 472	1 191	2 080	39 373	121 250	96 152	219 917	D D
Semiconductor and related	_			·								D
Other electronic component manufacturing	1	11	6	e	D	D	D	D	D	D	D	2 877
Navigational, measuring, electromedical, and control instruments manufacturing	_	27	11	4 966	272 171	2 009	4 441	77 280	648 402	411 766	1 136 885	D
Navigational, measuring, electromedical, and control												_
Electromedical and electrotherapeutic												D
Search, detection, navigation, guidance, aeronautical, and nautical	_	7	4	g	D	D	D	D	D	D	D	D
manufacturing Irradiation apparatus	_	4	2	g f	D	D	D	D	D	D	D	D D
Manufacturing and reproducing				·								
Manufacturing and reproducing				е								D
magnetic and optical media Prerecorded compact disc (except software), tape, and record reproducing	3	9	3	e 288	D 8 053	D 210	D 403	D 4 831	D 23 052	D 11 070	D 34 182	D 3 406
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con. Salt Lake City, UT Metropolitan Statistical Area—Con. Machinery manufacturing—Con. Engine, turbine, and power transmission equipment manufacturing. Engine, turbine, and power transmission equipment manufacturing. Other engine equipment manufacturing. Other general purpose machinery manufacturing. All other general purpose machinery manufacturing Fluid power cylinder and actuator manufacturing. Computer and peripheral equipment manufacturing Computer and peripheral equipment manufacturing Computer and peripheral equipment manufacturing. Radio and television broadcasting and wireless communications equipment manufacturing. Radio and television broadcasting and wireless communications equipment manufacturing. Radio and television broadcasting and wireless communications equipment manufacturing Other communications equipment manufacturing. Semiconductor and other electronic component manufacturing Semiconductor and other electronic component manufacturing Navigational, measuring, electromedical and electromedical and electromedical and control instruments manufacturing Navigational, measuring, electromedical, and nautical system and instrument manufacturing Navigation, guidance, aeronautical, and nautical system and instrument manufacturing Nearonautical, and nautical system and inst	SALT LAKE CITY-OGDEN-CLEARFIELD, UT COMBINED STATISTICAL AREA—Con. Salt Lake City, UT Metropolitan Statistical Area—Con. Machinery manufacturing—Con. Engine, turbine, and power transmission equipment manufacturing—Other engine equipment manufacturing—Other engine equipment manufacturing—All other general purpose machinery manufacturing—Iluid power cylinder and actuator manufacturing—Computer and peripheral equipment manufacturing—Computer and peripheral equipment manufacturing—Electronic computer manufacturing—Radio and television broadcasting and wireless communications equipment manufacturing—Radio and television broadcasting and wireless communications equipment manufacturing—Computer and peripheral equipment manufacturing—Aladio and television broadcasting and wireless communications equipment manufacturing—Computer manufacturing—Computer and television broadcasting and wireless communications equipment manufacturing—Computer and television broadcasting and wireless communications—Computer and television broadcasting and wireless communications—Computer and television broadcasting and wireless communications—Computer and television broadcasting—Computer and television—Computer a	SALT LAKE CITY-OGDEN-CLEARFIELD, UT COMBINED STATISTICAL AREA — Con. Salt Lake City, UT Metropolitan Statistical Area — Con. Machinery manufacturing—Con. Engine, turbine, and power transmission equipment manufacturing — 2 Engine, turbine, and power transmission equipment manufacturing — 2 Other engine equipment manufacturing — 11 All other general purpose machinery manufacturing — 5 Fluid power cylinder and actuator manufacturing — 90 Computer and peripheral equipment manufacturing — 90 Computer and peripheral equipment manufacturing — 10 Computer and peripheral equipment manufacturing — 10 Radio and television broadcasting and wireless communications equipment manufacturing — 5 Radio and television broadcasting and wireless communications equipment manufacturing — 5 Radio and television broadcasting and wireless communications equipment manufacturing — 5 Radio and television broadcasting and wireless communications equipment manufacturing — 5 Radio and television broadcasting and wireless communications equipment manufacturing — 5 Radio and television broadcasting and wireless communications equipment manufacturing — 5 Semiconductor and other electronic component manufacturing — 29 Semiconductor and other electronic component manufacturing — 27 Navigational, measuring — 27 Navigational, measuring — 27 Semiconductor and other electronic component manufacturing — 27 Navigational, measuring — 27 Navigational, measuring — 27 Semiconductor and other electronedical, and control instruments manufacturing — 27 Navigational, measuring — 27 Paradiation apparatus — 33 Manufacturing and reproducing magnetic and optical media. 27 Prerecorded compact disc (except software), tape, and	SALT LAKE CITY-OGDEN-CLEARFIELD, UT COMBINED STATISTICAL AREA—Con. Salt Lake City, UT Metropolitan Statistical Area—Con. Machinery manufacturing—Con. Engine, turbine, and power transmission equipment manufacturing ————————————————————————————————————	Geographic area and industry Computer and electronic product manufacturing Computer and electronic computer manufacturing Computer and electronic computer manufacturing Computer and electronic computer manufacturing Computer and electronic component manufacturing Computer and electronic computer manufacturing Computer and electronic product manufacturing Computer and electronic productor and electronic productor and electronic productor and other electronic component manufacturing Computer and electronic productor and other electronic component manufacturing Computer and electronic productor and electronic productoric producting and electronic and optical media. Computer and el	Geographic area and industry SALT LAKE CITY-OGDEN-CLEARFIELD, UT COMBINED STATISTICAL AREA—Con. Salt Lake City, UT Metropolitan Statistical Area—Con. Con. Con.	SALT LAKE CITY.OGDEN-CLEAFFIELD UT COMBINED STATISTICAL AREA—Con. Salt Lake City. UT Metropolitan Statistical Area—Con. Machinery manufacturing—Con. Engine, turbine, and power manufacturing—Con. Engine, turbine, and power manufacturing—Con. Computer and elegiment manufacturing————————————————————————————————————	SALT LAKE CITY-OGDEN-CLEARFIELD, UT COMBINED STATISTICAL AREA—Con. SAIT Lake City. UT Metropolitan Statistical Area—Con. Salt Lake City. UT Salt City. Salt Ci	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.	Casegraphic area and industry Et Total Total Total Total Casegraphic area and industry Et Total To	Geographic area and industry	SALT LAKE CITY-OGDEN- CLEARTELO, UT COMBINED For the payed For the payed

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Forme	aning of abbreviations and symbols, see	e intr	A establisl	JI I	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry		Cotabiloi	With 20 em- ploy-							Total cost of	Total value of	Total capital expendi-
		E ¹	Total	ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	materials (\$1,000)	shipments (\$1,000)	tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
	Salt Lake City, UT Metropolitan Statistical Area —Con.												
335	Electrical equipment, appliance, and component manufacturing	1	23	9	836	31 417	453	969	13 685	100 635	93 658	193 072	D
3359	Other electrical equipment and component manufacturing	_	9	6	f	D	D	D	D	D	D	D	4 357
33599	All other electrical equipment and component												
335991	manufacturing	-	9	6	f	D	D	D	D	D	D	D	4 357
335999	manufacturing	-	3	2	е	D	D	D	D	D	D	D	3 127
	electrical equipment and component manufacturing	2	6	4	е	D	D	D	D	D	D	D	1 230
336	Transportation equipment manufacturing	1	40	6	1 931	105 980	879	1 753	38 828	223 672	152 031	374 567	D
3364	Aerospace product and parts manufacturing	_	6	3	g	D	D	D	D	D	D	D	D
33641 336415	Aerospace product and parts manufacturing	_	6	3	g	D	D	D	D	D	D	D	D
	propulsion unit parts manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	1	150	40	3 128	90 643	2 430	4 592	59 344	300 322	193 828	494 620	16 503
3371	Household and institutional furniture and kitchen cabinet manufacturing	3	116	24	1 842	51 419	1 418	2 759	34 034	91 353	74 044	165 889	5 130
33711	Wood kitchen cabinet and countertop manufacturing	3	70	17	1 331	37 808	1 002	1 921	24 204	63 919	41 542	106 160	4 534
337110	Wood kitchen cabinet and countertop manufacturing	3	70	17	1 331	37 808	1 002	1 921	24 204	63 919	41 542	106 160	4 534
33712	Household and institutional furniture manufacturing	2	46	7	511	13 611	416	838	9 830	27 434	32 502	59 729	596
337122	Nonupholstered wood household furniture manufacturing	1	31	4	281	7 279	223	451	5 257	15 683	18 495	34 020	D
3372	Office furniture (including fixtures)	1		8	613								D
33721	manufacturing Office furniture (including		19			18 756	491	913	13 761	49 410	28 960	78 268	
337212	fixtures) manufacturing Custom architectural woodwork and millwork	1	19	8	613	18 756	491	913	13 761	49 410	28 960	78 268	D
337215	manufacturing	_	9	3	e 288	D 7 346	D 248	D 489	D 5 886	D 27 992	D 11 601	D 39 510	D D
3379	Other furniture related product manufacturing		15	8	673	20 468	521	920	11 549	159 559	90 824	250 463	D
33791	Mattress manufacturing	_	10	6	е	D	D	D D	D	D D	D D	D D	D D
337910 339	Mattress manufacturing Miscellaneous manufacturing	2	10 202	6 50	9 203	D 366 011	D 5 640	11 352	D 156 593	1 039 305	461 681	1 494 377	87 833
3391	Medical equipment and supplies manufacturing	2	92	29	5 826	261 288	3 109	6 226	90 938	796 193	267 257	1 057 544	80 411
33911	Medical equipment and					004 000	0.400	0.000		700 100	007.057		00 111
339112	supplies manufacturing Surgical and medical instrument manufacturing	2	92	29 14	5 826 h	261 288 D	3 109 D	6 226 D	90 938 D	796 193 D	267 257 D	1 057 544 D	80 411 D
339113	Surgical appliance and supplies manufacturing	2	13	9	1 652	81 405	811	1 644	27 684	240 480	71 906	309 918	5 272
339114	Dental equipment and supplies manufacturing	_	8	1	f	D	D	D	D	D	D	D	D
339116 3399	Dental laboratories Other miscellaneous	1	47	3	508	18 097	345	639	13 026	39 071	6 928	44 933	597
	manufacturing	1	110	21	3 377	104 723	2 531	5 126	65 655	243 112	194 424	436 833	7 422
33991 339911	Jewelry and silverware manufacturing Jewelry (except costume)	-	12	2	g	D	D	D	D	D	D	D	D
33992	manufacturing	-	9	1	g	D	D	D	D	D	D	D	D
339920	manufacturing	3	22	7	857	28 928	546	1 206	15 133	102 229	38 002	133 827	2 688
33995 339950	manufacturing	3 1 1	22 36 36	7 3 3	857 e e	28 928 D D	546 D D	1 206 D D	15 133 D D	102 229 D D	38 002 D D	133 827 D D	2 688 1 039 1 039

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

For me	eaning of abbreviations and symbols, see	e intro		<u>,</u> JI	All em	ployees	Pro	duction work	vers				
NAICS			establis			,							
code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY-OGDEN- CLEARFIELD, UT COMBINED STATISTICAL AREA—Con.												
	Salt Lake City, UT Metropolitan Statistical Area -Con.												
339 3399	Miscellaneous manufacturing—Con. Other miscellaneous manufacturing—Con.												
33999	All other miscellaneous manufacturing	1	31	9	929	26 011	668	1 387	12 785	68 232	35 032	102 372	2 895
339991	Gasket, packing, and sealing device manufacturing	<u>.</u>	4	2	525 f	20 011 D	D	1 307 D	12 705 D	D	D D	102 372 D	2 033 D
339999	All other miscellaneous manufacturing	2	23	6	398	10 224	296	522	5 576	28 236	19 496	46 989	616
	CEDAR CITY, UT MICROPOLITAN STATISTICAL AREA												
31-33	Manufacturing		50	11	1 382	44 754	959	1 950	27 076	199 853	166 168	358 909	19 212
322 3222	Paper manufacturing Converted paper product		2	2	е	D	D	D	D	D	D	D	D
	manufacturing	-	2	2	е	D	D	D	D	D	D	D	D
32223 322231	Stationery product manufacturing Die-cut paper and	-	1	1	е	D	D	D	D	D	D	D	D
022201	paperboard office supplies manufacturing	_	1	1	е	D	D	D	D	D	D	D	D
	LOGAN, UT-ID METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	1	197	52	9 440	284 305	6 674	13 680	171 805	671 279	2 025 910	2 753 321	32 680
311	Food manufacturing	-	28	9	2 762	81 040	2 412	5 154	65 999	327 169	1 118 371	1 446 978	D
3115 31151	Dairy product manufacturing Dairy product (except frozen)	1	9	5	1 039	33 116	925	1 885	27 830	110 449	517 525	628 736	6 945
311513	manufacturing	1	7 4	4 4	1 003	D 31 886	D 895	D 1 824	D 26 903	D 103 229	D 512 502	D 616 493	D 6 684
3116	Animal slaughtering and processing	_	3	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering and		3	2		D	D	D	D	D	D	D	D
311611	processing Animal (except poultry) slaughtering	_	2	1	g g	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing		7	2	f	D	D	D	D	D	D	D	D
31182	Cookie, cracker, and pasta												
311821	manufacturing	_	1	1	е	D D	D D	D D	D D	D D	D D	D D	D D
321	manufacturing Wood product manufacturing		13	2	e e	D	D	D	D	D	D	D	519
3219	Other wood product manufacturing	_	10	2	е	D	D	D	D	D	D	D	D
32191	Millwork	-	4	1	е	D	D	D	D	D	D	D	D
321911	Wood window and door manufacturing	-	1	1	е	D	D	D	D	D	D	D	D
323	Printing and related support activities	_	9	3	632	19 331	356	701	9 131	81 317	19 344	100 942	966
3231	Printing and related support activities	_	9	3	632	19 331	356	701	9 131	81 317	19 344	100 942	966
32311 323110	Printing	-	9	3	632	19 331	356	701	9 131	81 317	19 344	100 942	966
	printing	-	5	1	f	D	D	D	D	D	D	D	D
325	Chemical manufacturing Pharmaceutical and medicine	9	9	4	f	D	D	D	D	D	D	D	D
3254	manufacturing	9	3	3	е	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine manufacturing	9	3	3	е	D	D	D	D	D	D	D	D
325414	Biological product (except diagnostic) manufacturing	9	3	3	е	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	2	19	6	650	12 802	507	1 085	8 448	47 839	34 633	84 398	2 102
3261	Plastics product manufacturing	2	18	6	f	D	D	D	D	D	D	D	2 102
32611	Plastics packaging materials and unlaminated film and												
326111	sheet manufacturing	_	1 1	1 1	e e	D D	D D	D D	D D	D D	D D	D D	D D

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

-or me	eaning of abbreviations and symbols, see	e intr	Α	ui l	Allom	ployees	Dr.	oduction wor	kore				
			establis	hments ²	All elli	pioyees	FIG	Dauction wor	Keis				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	LOGAN, UT-ID METROPOLITAN STATISTICAL AREA—Con.												
332	Fabricated metal product manufacturing	_	27	8	350	9 873	279	468	6 935	27 624	10 922	36 650	1 212
334	Computer and electronic product manufacturing	_	r12	r7	r916	r30 879	^r 623	r1 124	r16 662	r69 397	r45 129	r115 158	D
3344	Semiconductor and other electronic component manufacturing	_	r4	r3	^r 593	¹ 16 471	^r 499	⁷ 887	¹ 12 691	¹ 37 329	'27 515	¹ 65 753	D
33441	Semiconductor and other electronic component												
334412	manufacturing	_	r4 1	r3 1	r593 e	^r 16 471 D	^r 499 D	^r 887 D	^r 12 691	r37 329 D	'27 515 D	^r 65 753	D D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	7	4	e	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing	_	7	4	e	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	_	¹ 26	¹ 6	h	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	_	^r 21	^r 6	h	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods manufacturing	_	5	4	h	D	D	D	D	D	D	D	D
339920	Sporting and athletic goods manufacturing	_	5	4	h	D	D	D	D	D	D	D	D
	PRICE, UT MICROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	-	17	4	379	13 797	263	559	9 638	31 071	53 166	88 385	736
	PROVO-OREM, UT METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	1	451	109	13 887	472 137	9 038	16 943	241 356	1 506 758	1 061 404	2 527 786	133 099
311 3113	Food manufacturing Sugar and confectionery product	_	r35	8	r2 872	r80 245	r1 570	r3 458	r31 724	r173 869	r320 847	r491 692	r46 399
31134	manufacturing Nonchocolate confectionery	-	4	2	354	6 350	285	547	4 433	11 535	2 119	13 533	D
311340	manufacturing Nonchocolate confectionery manufacturing	_	2 2	1	e e	D D	D D	D D	D D	D D	D D	D D	D D
3114	Fruit and vegetable preserving and specialty food manufacturing	_	5	4	g	D	D	D	D	D	D	D	D
31141 311412	Frozen food manufacturing Frozen specialty food	-	3	2	g	D	D	D	D	D	D	D	D D
31142	manufacturing Fruit and vegetable canning, pickling, and drying	_	2 2	1 2	g e	D D	D D	D D	D D	D D	D D	D D	D
311421 323	Fruit and vegetable canning . Printing and related support	-	2	2	e	D	D	D	D	D	D	D	D
3231	activities	-	39	7	787	24 432	546	999	13 835	58 889	38 101	96 748	6 041
	activities	-	39	7	787	24 432	546	999	13 835	58 889	38 101	96 748	6 041
32311 323110	Printing Commercial lithographic printing	1	37 15	7 5	f 416	D 13 137	D 299	D 527	8 101	D 26 478	D 15 753	D 42 158	D 4 083
325	Chemical manufacturing	4	24	10	1 591	78 160	726	1 379	25 254	211 338	112 054	322 380	22 329
3254	Pharmaceutical and medicine manufacturing	5	9	6	1 093	51 614	402	803	11 675	156 403	71 175	225 917	9 818
32541 325412	Pharmaceutical and medicine manufacturing	5	9	6	1 093	51 614	402	803	11 675	156 403	71 175	225 917	9 818
3256	manufacturing	5 -	3	5 2	g e	D D	D D	D D	D D	D D	D D	D D	D D
32562 325620	Toilet preparation manufacturing Toilet preparation	_	3	2	е	D	D	D	D	D	D	D	D
326	manufacturing Plastics and rubber products	_	3	2	e	D	D	D	D	D 40 645	D 00 500	D 00 017	D 0.040
3261	manufacturing	1	24 23	8 7	628 f	18 885 D	487 D	839 D	11 875 D	48 645 D	26 588 D	69 917 D	2 649 D
32619	Other plastics product		15	6	294	9 728	206	371			11 203	34 922	D
	manufacturing		1 15	1 01	294	9 /28	∠∪6	3/1	5 116	23 512	11 203	34 922	ט

[Includes data for industry groups and industries with 250 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For definitions of CSAs, MeSAs, MISAs, and MDs, see Appendix E. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

	aning of abbreviations and symbols, see		Α	III hments ²	All em	ployees	Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PROVO-OREM, UT METROPOLITAN STATISTICAL AREA—Con.												
327	Nonmetallic mineral product manufacturing	5	r27	5	r516	r19 161	r396	r830	r12 335	^r 65 214	r56 273	r121 213	r2 498
331	Primary metal manufacturing	-	15	7	f	D	D	D	D	D	D	D	D
3315	Foundries	_	11	5	565	17 645	453	905	12 275	48 900	35 636	82 671	1 244
33151 331511	Ferrous metal foundries	_	8 6	3	400	D 14 299	D 320	D 649	10 092	D 42 325	D 33 556	73 865	D D
332	Fabricated metal product manufacturing	2	68	18	2 115	72 450	1 535	2 863	46 083	157 635	143 289	300 390	14 698
3323	Architectural and structural metals manufacturing	1	22	4	387	13 869	306	658	9 661	28 280	40 995	69 054	1 057
3329	Other fabricated metal product manufacturing	_	11	7	1 258	42 305	913	1 549	26 613	96 429	76 393	172 334	D
33291 332911	Metal valve manufacturing Industrial valve	-	3	1	е	D	D	D	D	D	D	D	D
33299	manufacturing All other fabricated metal	_	2	1	е	D	D	D	D	D	D	D	D
332999	product manufacturing All other miscellaneous fabricated metal product	_	8	6	f	D	D	D	D	D	D	D	D
000	manufacturing	-	6	6	f	D	D	D	D 0.004	D	D	D 70 004	10 672
333 334	Machinery manufacturing Computer and electronic product	3	22	9	455	18 013	290	567	8 994	43 183	28 035	72 664	D
3344	manufacturing	-	21	12	1 580	61 262	1 021	1 215	30 667	506 200	72 987	550 737	D
	electronic component manufacturing	-	5	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component		_										6
334413	manufacturing Semiconductor and related device manufacturing	_	5	1	f f	D D	D D	D D	D D	D D	D D	D D	D D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	1	7	4	449	14 830	277	537	6 092	32 057	21 575	52 848	D
33451	Navigational, measuring, electromedical, and control instruments manufacturing	1	7	4	449	14 830	277	537	6 092	32 057	21 575	52 848	D
336	Transportation equipment manufacturing	2	13	2	318	9 111	230	452	5 764	30 244	48 365	81 464	360
337	Furniture and related product manufacturing	2	56	9	984	25 949	788	1 484	17 169	54 235	33 948	88 198	5 345
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	46	5	759	20 105	610	1 169	13 090	42 479	26 636	69 210	D
33712 337127	Household and institutional furniture manufacturing Institutional furniture	1	18	3	518	14 568	423	838	9 181	33 320	19 659	52 995	D
	manufacturing	-	3	1	е	D	D	D	D	D	D	D	D
339 3399	Miscellaneous manufacturing Other miscellaneous	2	52	5	416	12 769	278	493	6 666	35 368	15 495	49 993	1 056
	manufacturing	2	29	3	е	D	D	D	D	D	D	D	751
	ST. GEORGE, UT METROPOLITAN STATISTICAL AREA												
31-33	Manufacturing	1	122	35	2 192	61 411	1 720	3 374	42 810	145 283	135 749	281 772	5 927
332	Fabricated metal product manufacturing	2	22	6	394	10 910	328	608	7 804	19 183	24 541	44 505	1 134
3323	Architectural and structural metals manufacturing	2	11	5	282	9 191	233	395	6 367	12 805	21 128	34 775	708
337	Furniture and related product manufacturing	_	19	6	303	7 942	244	465	5 812	16 223	9 673	25 847	470
3371	Household and institutional furniture and kitchen cabinet manufacturing	_	19	6	303	7 942	244	465	5 812	16 223	9 673	25 847	470
33711	Wood kitchen cabinet and												
337110	countertop manufacturing Wood kitchen cabinet and countertop manufacturing	_	14	6	289 289	7 546 7 546	235 235	448 448	5 595 5 595	15 548 15 548	8 902 8 902	24 401 24 401	D D
			L '+		203	, 540	200	770	1 5 555	10 040	3 302	L-7 701	

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent or more.

89 percent; 9–90 percent or more.

2Includes establishments with payroll at any time during the year.

3Industries with 250 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 250 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: e–250 to 499 employees; f–500 to 999 employees; g–1,000 to 24,999 employees; h–2,500 to 49,999 employees; i–5,000 to 99,999 employees; m–100,000 employees or more.

4Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Industry Statistics for Counties: 2002

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

terms,	and geographical definitions, see note at	end			ation on geo	graphic areas	followed by *,	see Append	lix D. For mea	ining of abbrevia	ations and symbo	ols, see introduc	tory text]
			establisl	nments ²	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BOX ELDER												
31-33	Manufacturing	-	60	19	7 807	359 674	4 957	9 363	184 514	974 430	831 063	1 808 989	39 498
332	Fabricated metal product manufacturing	-	14	6	575	22 800	428	783	17 351	45 294	66 944	112 651	1 603
3323	Architectural and structural metals manufacturing	_	6	4	509	20 884	373	663	15 909	41 489	58 705	100 570	1 517
336	Transportation equipment manufacturing	_	4	4	i	D	D	D	D	D	D	D	D
3363	Motor vehicle parts manufacturing	_	3	3	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts manufacturing	_	3	3	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing	_	3	3	g	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	_	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	_	1	1	h	D	D	D	D	D	D	D	D
336415	Guided missile and space vehicle propulsion unit and propulsion unit parts					_	_		_		_		
337	manufacturing Furniture and related product	-	1	1	h	D	D	D	D	D	D	D	D
3371	manufacturing Household and institutional	-	7	1	g	D	D	D	D	D	D	D	D
	furniture and kitchen cabinet manufacturing	-	7	1	g	D	D	D	D	D	D	D	D
33712	Household and institutional furniture manufacturing	_	3	1	g	D	D	D	D	D	D	D	D
337121	Upholstered household furniture manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
	CACHE												
31-33	Manufacturing	1	182	49	9 251	276 297	6 555	13 454	167 719	654 784	2 012 572	2 724 117	32 017
311	Food manufacturing	-	25	9	h	D	D	D	D	D	D	D	D
3115 31151	Dairy product manufacturing Dairy product (except frozen)	1	9	5	1 039	33 116	925	1 885	27 830	110 449	517 525	628 736	D
311513	manufacturing Cheese manufacturing	1	7 4	4 4	g 1 003	D 31 886	D 895	D 1 824	D 26 903	D 103 229	D 512 502	D 616 493	D D
3116	Animal slaughtering and processing	_	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering and		2	2		D	D	D	D	D	D	D	D
311611	processing Animal (except poultry) slaughtering	_	1	1	g g	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	-	5	2	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	_	8	3	f	D	D	D	D	D	D	D	D
3231	Printing and related support activities	_	8	3	f	D	D	D	D	D	D	D	D
32311	Printing	_	8	3	f	D	D	D	D	D	D	D	D
323110	Commercial lithographic printing	-	5	1	f	D	D	D	D	D	D	D	D
325	Chemical manufacturing	9	8	3	f	D	D	D	D	D	D	D	D
326	Plastics and rubber products manufacturing	2	17	5	f	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	2	16	5	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	_	r12	r 7	r916	r30 879	^r 623	r1 124	r16 662	r69 397	r45 129	r115 158	D
3344	Semiconductor and other electronic component manufacturing	_	r4	r3	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component												
339	manufacturing Miscellaneous manufacturing	_	r4 r26	r3 r6	f h	D D	D D	D D	D D	D D	D D	D D	D D
3399	Other miscellaneous manufacturing	_	r21	·6	h	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods												
339920	manufacturing	_	5	4	h h	D D	D D	D D	D D	D D	D D	D D	D D

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1011110, 1	and geographical definitions, see note at	Cita	А	JI		ployees		oduction wor		aming of abbrevio	and by mo	715, 500 mirodao	lory text]
			establisl	nments ²	Allelli	pioyees	FIG	buuciion won	Keis				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	DAVIS												
31-33	Manufacturing	1	276	76	9 611	303 846	7 552	14 677	207 133	939 417	1 381 528	2 313 081	D
311	Food manufacturing	3	18	9	1 453	42 258	1 219	2 314	28 509	164 272	211 646	378 536	14 319
3118	Bakeries and tortilla manufacturing	5	6	3	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	61	13	1 161	40 269	882	1 504	25 866	77 330	81 047	163 388	D
336	Transportation equipment manufacturing	-	15	7	f	D	D	D	D	D	D	D	D
3362	Motor vehicle body and trailer manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
33621	Motor vehicle body and trailer manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
339	Miscellaneous manufacturing	1	33	7	2 934	79 464	2 470	5 331	64 091	256 359	149 168	403 188	13 069
3391	Medical equipment and supplies manufacturing	-	12	3	526	11 706	434	779	7 808	23 798	13 254	36 578	872
33911	Medical equipment and supplies manufacturing	-	12	3	526	11 706	434	779	7 808	23 798	13 254	36 578	872
3399	Other miscellaneous manufacturing	1	21	4	2 408	67 758	2 036	4 552	56 283	232 561	135 914	366 610	12 197
33992	Sporting and athletic goods manufacturing	1	5	4	g	D	D	D	D	D	D	D	D
339920	Sporting and athletic goods manufacturing	1	5	4	g	D	D	D	D	D	D	D	D
	IRON												
31-33	Manufacturing	-	50	11	1 382	44 754	959	1 950	27 076	199 853	166 168	358 909	19 212
	SALT LAKE												
31-33	Manufacturing		1 434	412	49 307	1 909 232	30 947	60 314	919 017	5 550 134	5 245 712	10 847 204	343 315
311 3115	Food manufacturing Dairy product manufacturing	1	107 11	38 5	4 029 f	121 010 D	2 658 D	5 208 D	65 175 D	459 337 D	531 257 D	989 351 D	28 496 D
31151	Dairy product (except frozen)			3								5	D
311511	manufacturing	_	9 4	3 3	f 597	D 22 948	D 318	D 744	D 11 278	D 87 692	D 126 782	D 214 582	D D
3116	Animal slaughtering and processing	_	8	5	f	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing	_	8	5	f	D	D	D	D	D	D	D	D
3118	Bakeries and tortilla manufacturing	3	52	15	g	D	D	D	D	D	D	D	D
31181 311812	Bread and bakery product manufacturing	3 4	44 15	14 7	g f	D D	D D	D D	D D	D D	D D	D D	D D
314	Textile product mills	5	27	7	f	D	D	D	D	D	D	D	D
315	Apparel manufacturing	-	20	3	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31519 315192	Other apparel knitting mills Underwear and nightwear knitting mills	- -	1	1	f f	D D	D D	D D	D D	D D	D D	D D	D D
321	Wood product manufacturing	1	55	20	1 063	30 660	850	1 611	20 947	55 839	61 443	116 260	1 662
3219	Other wood product manufacturing	2	48	15	f	D	D	D	D	D	D	D	D
32191	Millwork	2	31	9	f	D	D	D	D	D	D	D	D
322	Paper manufacturing	-	19	10	g	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	_	19	10	g	D	D	D	D	D	D	D	D
32221	Paperboard container manufacturing	_	8	7	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	2	176	40	h	D	D	D	D	D	D	D	16 122
3231	Printing and related support activities	2	176	40	h	D	D	D	D	D	D	D	16 122
32311 323110	Printing Commercial lithographic printing	3	154 59	36 15	h 1 259	D 44 962	D 991	D 1 908	30 951	107 122	67 060	D 174 509	15 575 8 307

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terms, a	and geographical definitions, see note at	end	of table. I			· ·				ning of abbrevia	ations and symbo	ols, see introduc	tory text]
			establis	nments ²	All emp	oloyees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE—Con.												
325	Chemical manufacturing	1	44	18	g	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	2	9	7	f	D	D	D	D	D	D	D	D
32541 325412	Pharmaceutical and medicine manufacturing	2	9	7	f	D	D	D	D	D	D	D	D
3256	manufacturing Soap, cleaning compound, and toilet preparation manufacturing .	1	7	5 2	g	D D	D D	D D	D D	D D	D D	D D	D D
32561	Soap and cleaning compound				9								
325611	manufacturing Soap and other detergent manufacturing	- -	6 4	1	f f	D D	D D	D D	D D	D D	D D	D D	D D
326	Plastics and rubber products manufacturing	2	66	24	g	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	3	56	22	g	D	D	D	D	D	D	D	D
32619 326199	Other plastics product manufacturing All other plastics product manufacturing	1	36 32	17 15	g g	D D	D D	D D	D D	D D	D D	D D	D D
327	Nonmetallic mineral product												
3273	manufacturing Cement and concrete product	3	58	20	1 236	45 094	890	1 783	28 209	117 489	98 570	215 559	D
	manufacturing	3	26	15	f	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	r22	r8	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production and processing	_	10	4	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting and												
331411	refining Primary smelting and refining of copper	_	2	3 2	f f	D D	D D	D D	D D	D D	D D	D D	D D
332	Fabricated metal product manufacturing	1	^r 248	^r 57	r4 237	¹ 151 788	^r 2 962	^r 5 644	'91 152	'330 444	¹ 226 283	^r 561 887	D
3323	Architectural and structural metals manufacturing	1	89	22	g	D	D	D	D	D	D	D	D
33231 33232	Plate work and fabricated structural product manufacturing	1	37	9	f	D	D	D	D	D	D	D	D
	metal products manufacturing	1	52	13	f	D	D	D	D	D	D	D	D
3327	Machine shops; turned product; and screw, nut, and bolt manufacturing	3	89	20	f	D	D	D	D	D	D	D	2 799
33271 332710	Machine shops	3	82 82	18 18	792 792	28 626 28 626	608 608	1 115 1 115	20 208 20 208	57 452 57 452	23 320 23 320	80 138 80 138	2 358 2 358
3329	Other fabricated metal product manufacturing	1	28	4	f	D	D	D	D	D	D	D	D
33291 332912	Metal valve manufacturing Fluid power valve and hose fitting manufacturing	- -	2 1	1	f f	D D	D D	D D	D D	D D	D D	D D	D D
333	Machinery manufacturing	1	78	22	h	D	D	D	D	D	D	D	D
3333	Commercial and service industry machinery manufacturing	1	19	5	f	D	D	D	D	D	D	D	1 790
33331	Commercial and service industry machinery		10	-					_			5	4 700
333319	manufacturing Other commercial and service industry machinery manufacturing	1	19	5	T f	D D	D D	D D	D D	D D	D D	D D	1 790 D
3339	Other general purpose machinery manufacturing	_	10	5	' f	D	D	D	D	D	D	D	D
33399	All other general purpose machinery manufacturing	_	5	2	f	D	D	D	D	D	D	D	D

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terms, a	and geographical definitions, see note at	end	1		ation on geog	graphic areas				ining of abbrevia	ations and symbo	ols, see introduc	tory text]
			establis	.II hments ²	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE—Con.												
334	Computer and electronic product manufacturing	_	89	35	i	D	D	D	D	D	D	D	D
3341	Computer and peripheral equipment manufacturing	_	9	3	f	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	_	9	3	f	D	D	D	D	D	D	D	D
334111	Electronic computer manufacturing	_	4	2	f f	D	D	D	D	D	D	D	D
3342	Communications equipment manufacturing	_	10	4	822	37 671	300	378	9 113	51 797	37 201	85 712	D
3344	Semiconductor and other electronic component manufacturing	_	29	11	1 770	65 472	1 191	2 080	39 373	121 250	96 152	219 917	D
33441	Semiconductor and other electronic component												
334412	manufacturing	_	29 12	11	1 770 f	65 472 D	1 191 D	2 080 D	39 373 D	121 250 D	96 152 D	219 917 D	D D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	_	27	11	4 966	272 171	2 009	4 441	77 280	648 402	411 766	1 136 885	D
33451	Navigational, measuring, electromedical, and control												
334510	instruments manufacturing Electromedical and electrotherapeutic	-	27	11	4 966	272 171	2 009	4 441	77 280	648 402	411 766	1 136 885	D
334511	apparatus manufacturing Search, detection, navigation, guidance, aeronautical, and nautical	_	7	4	g	D	D	D	D	D	D	D	D
334517	system and instrument manufacturing Irradiation apparatus manufacturing	_ _	4	2	g f	D D	D D	D D	D D	D D	D D	D D	D D
335	Electrical equipment, appliance, and component manufacturing	1	23	9	836	31 417	453	969	13 685	100 635	93 658	193 072	D
3359	Other electrical equipment and component manufacturing	_	9	6	f	D	D	D	D	D	D	D	4 357
33599	All other electrical equipment and component manufacturing	_	9	6	f	D	D	D	D	D	D	D	4 357
336	Transportation equipment manufacturing	1	38	5	g	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	_	5	2	g	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	_	5	2	g	D	D	D	D	D	D	D	D
336415	Guided missile and space vehicle propulsion unit and propulsion unit parts manufacturing	_	1	1	9	D	D	D	D	D	D	D	D
337	Furniture and related product manufacturing	1	140	40	3 102	89 901	2 411	4 556	58 875	298 734	192 640	491 844	16 458
3371	Household and institutional furniture and kitchen cabinet manufacturing	3	106	24	1 816	50 677	1 399	2 723	33 565	89 765	72 856	163 113	5 085
33711	Wood kitchen cabinet and							_				-	
337110	countertop manufacturing Wood kitchen cabinet and countertop manufacturing	3	64 64	17 17	g g	D D	D D	D D	D D	D D	D D	D D	D D
3372	Office furniture (including fixtures) manufacturing	1	19	8	613	18 756	491	913	13 761	49 410	28 960	78 268	D
33721	Office furniture (including fixtures) manufacturing	1	19	8	613	18 756	491	913	13 761	49 410	28 960	78 268	D
3379	Other furniture related product manufacturing	_	15	8	673	20 468	521	920	11 549	159 559	90 824	250 463	D
339	Miscellaneous manufacturing	2	199	50	i	D	D	D	D	D	D	D	87 823
3391	Medical equipment and supplies manufacturing	2	91	29	i	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing	2	91	29	i	D	D	D	D	D	D	D	D
339112	Surgical and medical instrument manufacturing	2	17	14	h	D	D	D	D	D	D	D	D
339113	Surgical appliance and supplies manufacturing	2	13	9	1 652	81 405	811	1 644	27 684	240 480	71 906	309 918	D
339114 339116	Dental equipment and supplies manufacturing Dental laboratories	_ 1	8 46	1 3	f f	D D	D D	D D	D D	D D	D D	D D	D D

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terms,	and geographical definitions, see note at	end	of table.	For inform	ation on geog	graphic areas	followed by *,	see Append	lix D. For mea	ining of abbrevia	ations and symbo	ols, see introduc	tory text]
			establis	III hments ²	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE—Con.												
339 3399	Miscellaneous manufacturing—Con. Other miscellaneous manufacturing	1	108	21	h	D	D	D	D	D	D	D	D
33991	Jewelry and silverware manufacturing		12	2		D	D	D	D	D	D	D	D
339911	Jewelry (except costume) manufacturing	_	9	1	g g	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods manufacturing	3	22	7	857	28 928	546	1 206	15 133	102 229	38 002	133 827	2 688
339920	Sporting and athletic goods manufacturing	3	22	7	857	28 928	546	1 206	15 133	102 229	38 002	133 827	2 688
33999	All other miscellaneous manufacturing	1	31	9	929	26 011	668	1 387	12 785	68 232	35 032	102 372	2 895
339991	Gasket, packing, and sealing device manufacturing	_	4	2	f	D	D	D	D	D	D	D	D
	SANPETE												
31-33	Manufacturing	1	21	7	991	19 452	789	1 282	12 294	43 089	64 270	103 996	D
311	Food manufacturing	_	7	2	f	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing	_	3	1	f	D	D	D	D	D	D	D	D
31161 311615	Animal slaughtering and processing	_ _	3 1	1 1	f f	D D	D D	D D	D D	D D	D D	D D	D D
	SUMMIT												
31-33	Manufacturing	2	40	5	522	21 705	312	577	10 162	48 695	37 010	85 052	2 377
	TOOELE												
31-33	Manufacturing	_	28	7	1 049	41 199	850	1 756	31 368	132 848	97 653	232 809	7 874
	UTAH												
31-33	Manufacturing	1	445	106	13 661	466 003	8 864	16 618	237 580	1 490 084	1 053 383	2 505 921	132 834
311	Food manufacturing	_	'35	8	^r 2 872	r80 245	^r 1 570	r3 458	'31 724	r173 869	⁷ 320 847	r491 692	D
3114	Fruit and vegetable preserving and specialty food manufacturing	_	5	4	g	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	_	3	2	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food manufacturing Printing and related support	-	2	1	g	D	D	D	D	D	D	D	D
323	activities	-	39	7	787	24 432	546	999	13 835	58 889	38 101	96 748	6 041
3231 32311	Printing and related support activities	_ _	39 37	7	787 f	24 432 D	546 D	999 D	13 835 D	58 889 D	38 101 D	96 748 D	6 041 D
325	Printing Chemical manufacturing	4	24	10	1 591	78 160	726	1 379	25 254	211 338	112 054	322 380	D
3254	Pharmaceutical and medicine manufacturing	5	9	6	1 093	51 614	402	803	11 675	156 403	71 175	225 917	9 818
32541	Pharmaceutical and medicine	_			4 000	E4 044	400	000	44 075	450 400	74 475	005.047	0.040
325412	manufacturing	5 5	9 7	6 5	1 093 g	51 614 D	402 D	803 D	11 675 D	156 403 D	71 175 D	225 917 D	9 818 D
326	Plastics and rubber products manufacturing	1	22	7	f	D	D	D	D	D	D	D	D
3261	Plastics product manufacturing	1	22	7	f	D	D	D	D	D	D	D	D
327	Nonmetallic mineral product manufacturing	5	¹ 25	5	f	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	-	15	7	f	D	D	D	D	D	D	D	D
3315	Foundries	-	11	5	565	17 645	453	905	12 275	48 900	35 636	82 671	1 244
332	Fabricated metal product manufacturing	2	67	17	g	D	D	D	D	D	D	D	D
3329	Other fabricated metal product manufacturing	_	11	7	1 258	42 305	913	1 549	26 613	96 429	76 393	172 334	D
33299	All other fabricated metal product manufacturing	_	8	6	f	D	D	D	D	D	D	D	D
332999	All other miscellaneous fabricated metal product manufacturing	_	6	6	f	D	D	D	D	D	D	D	10 672

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terms, e	and geographical definitions, see note at	ena		.II		· ·				ning of apprevia	ations and symbo	ois, see introduct	ory textj
			establis	hments ²	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	UTAH-Con.												
334	Computer and electronic product manufacturing	_	21	12	1 580	61 262	1 021	1 215	30 667	506 200	72 987	550 737	D
3344	Semiconductor and other electronic component manufacturing	_	5	4	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component												
334413	manufacturing	-	5 1	4	f	D D	D D	D D	D D	D D	D D	D D	D D
337	device manufacturing Furniture and related product	2	55	8		D	D	D	D	D	D	D	D
3371	manufacturing Household and institutional furniture and kitchen cabinet manufacturing	1	45	4	f	D	D	D	D	D	D	D	D
33712	Household and institutional furniture manufacturing	1	18	3	518	14 568	423	838	9 181	33 320	19 659	52 995	D
	WASHINGTON		10		0.0	14 000	420	000	0 101	00 020	10 000	02 000	5
31-33	Manufacturing	1	122	35	2 192	61 411	1 720	3 374	42 810	145 283	135 749	281 772	5 927
	WEBER												
31-33	Manufacturing	1	231	72	12 100	427 949	8 903	15 992	270 578	1 777 081	1 640 374	3 402 077	111 493
311	Food manufacturing	_	21	11	1 534	53 985	872	1 324	28 660	286 049	219 764	505 982	3 694
3118	Bakeries and tortilla manufacturing	_	6	3	f	D	D	D	D	D	D	D	D
31181 311812	Bread and bakery product manufacturing	_ _	6	3	f f	D D	D D	D D	D D	D D	D D	D D	D D
322	Paper manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
32229	Other converted paper product manufacturing		1	1	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
331	Primary metal manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
332	Fabricated metal product manufacturing	1	54	16	1 364	52 389	988	2 101	32 370	126 080	96 209	223 298	5 670
3323	Architectural and structural metals manufacturing	_	19	10	992	41 604	677	1 503	24 058	89 961	77 504	167 826	D
33231	Plate work and fabricated structural product												
332312	manufacturing Fabricated structural metal	-	6	3	543	24 336 24 336	320	657	12 136	57 508	50 006	107 501	588
333	manufacturing Machinery manufacturing	_	6 8	3	543	24 336 D	320 D	657 D	12 136	57 508 D	50 006	107 501	588 D
3339	Other general purpose machinery manufacturing	_	2	2	g	D	D	D	D	D	D	D	D
33399	All other general purpose												
333995	machinery manufacturing Fluid power cylinder and actuator manufacturing	_	1	1	g f	D D	D D	D D	D D	D D	D D	D D	D D
334	Computer and electronic product manufacturing	9	8	2	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring, electromedical, and control instruments manufacturing	9	2	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control				3								
334510	instruments manufacturing Electromedical and electrotherapeutic	9	2	1	g	D	D	D	D	D	D	D	D
336	apparatus manufacturing Transportation equipment	9	1	1	g	D	D	D	D	D	D	D	D
3363	manufacturing	_	15	9	h	D	D	D	D	D	D	D	D
	manufacturing	-	7	6	g	D	D	D	D	D	D	D	D
33639 336399	Other motor vehicle parts manufacturing All other motor vehicle parts manufacturing	_ _	6	6	g g	D D	D D	D D	D D	D D	D D	D D	D D
337	Furniture and related product manufacturing	1	18	4	647	15 590	486	606	8 125	34 089	24 318	58 988	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

¹Includes establishments with payroll at any time during the year.
³Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: f–500 to 999 employees; g–1,000 to 2,499 employees; h–2,500 to 4,999 employees; i–5,000 to 99,999 employees; m–100,000 employees more.

¹Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 4. Industry Statistics for Places: 2002

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

1011113, 1	and geographical definitions, see note at	Toriu	T table. I	01 111101111	allon on geog	grapriic areas	ollowed by ,	see Append	IIX D. TOTTIGE	I III OI ADDIEVI	ations and symbol	Jis, see iiitioddo	lory text]
			establisl	.ll nments ²	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E ¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BRIGHAM CITY												
31-33	Manufacturing	_	22	9	5 315	263 094	2 802	5 015	105 713	703 955	490 846	1 191 571	24 374
336	Transportation equipment												
3363	manufacturing	_	2	2	h	D	D	D	D	D	D	D	D
3303	manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
33639	Other motor vehicle parts manufacturing		1	1	g	D	D	D	D	D	D	D	D
336399	All other motor vehicle parts manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product and parts		·		9								D
	manufacturing	-	1	1	h	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	_	1	1	h	D	D	D	D	D	D	D	D
336415	Guided missile and space vehicle propulsion unit and propulsion unit parts manufacturing	_	1	1	h	D	D	D	D	D	D	D	D
	CEDAR CITY												
31-33	Manufacturing	_	45	11	g	D	D	D	D	D	D	D	D
	CLEARFIELD												
31-33	Manufacturing	_	44	24	5 262	157 366	4 332	9 029	119 674	522 373	384 232	901 430	32 515
311	Food manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment												
220	manufacturing	-	4	4 5	2 706	D 75 649	D 267	D 5 149	62 091	D 246 722	D 140 078	D 387 395	4 851 D
339 3399	Miscellaneous manufacturing Other miscellaneous	1	0	5	2 796	75 648	2 367	5 149	62 091	246 722	142 978	387 395	U
0000	manufacturing	1	4	3	g	D	D	D	D	D	D	D	12 055
33992 339920	Sporting and athletic goods manufacturing Sporting and athletic goods manufacturing	1	4	3	g g	D D	D D	D D	D D	D D	D D	D D	12 055 12 055
	•	ı.		0	9	5							12 000
01.00	DRAPER	_	40	15	0.144	00.105	1 005	0.007	40.000	007 705	110 000	400.075	10.700
31-33 339	Manufacturing Miscellaneous manufacturing	2	46	15 5	2 144 1 454	96 165 78 481	1 295 753	2 637 1 566	40 389 28 211	287 765 249 127	116 368 60 408	400 375 305 313	10 788 5 920
3391	Medical equipment and supplies	_		3	1 454	70 401	733	1 300	20 211	243 127	00 400	303 313	3 320
	manufacturing	2	5	5	g	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing	2	5	5	g	D	D	D	D	D	D	D	D
339113	Surgical appliance and supplies manufacturing	3	3	3	g	D	D	D	D	D	D	D	D
	LAYTON												
31-33	Manufacturing	7	38	5	556	20 008	441	920	14 750	87 103	80 568	167 538	4 030
	LINDON												
31-33	Manufacturing	1	40	11	809	26 650	581	1 160	16 023	58 463	51 632	109 948	3 196
	LOGAN												
31-33	Manufacturing	1	90	29	6 192	191 199	3 973	8 025	105 155	328 481	1 127 538	1 510 701	23 266
311	Food manufacturing	2	7	3	f	D	D	D	D	D	D	D	D
3115	Dairy product manufacturing	2	2	2	f	D	D	D	D	D	D	D	D
31151	Dairy product (except frozen) manufacturing	2	,	2	,	D	D	D	D	D	D	D	D
311513	Cheese manufacturing	2	2 2	2 2	f	D	D	D	Б	Ď	D	Ď	D
323	Printing and related support activities	_	6	3	f	D	D	D	D	D	D	D	D
3231	Printing and related support activities	_	6	3	f	D	D	D	D	D	D	D	D
32311 323110	Printing Commercial lithographic	-	6	3	f	D	D	D	D	D	D	D	D
	printing	-	3	1	f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	-	r9	r5	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	_	^r 4	r3	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component manufacturing	_	r4	r3	f	D	D	D	D	D	D	D	D

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

terms,	and geographical definitions, see note at	t end	of table. I	For inform	ation on geo	graphic areas t	followed by *,	see Append	lix D. For mea	ning of abbrevia	ations and symbo	ols, see introduc	tory text]
			A establis	ll hments ²	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	LOGAN-Con.												
339	Miscellaneous manufacturing	-	^r 19	r4	h	D	D	D	D	D	D	D	D
3399	Other miscellaneous manufacturing	-	r14	r4	h	D	D	D	D	D	D	D	D
33992	Sporting and athletic goods manufacturing	_	3	2	g	D	D	D	D	D	D	D	D
339920	Sporting and athletic goods manufacturing	-	3	2	g	D	D	D	D	D	D	D	D
	MIDVALE												
31-33	Manufacturing	6	42	7	793	27 742	500	971	12 819	77 058	37 304	113 943	D
	MURRAY												
31-33	Manufacturing	4	136	28	2 148	66 721	1 529	2 903	37 565	143 052	95 981	239 720	4 777
	NORTH SALT LAKE												
31-33	Manufacturing	-	58	23	1 768	55 640	1 317	2 153	34 058	140 833	373 458	509 933	16 816
332	Fabricated metal product manufacturing	-	19	8	688	22 660	512	778	13 744	32 579	27 242	62 512	1 415
	OGDEN												
31-33	Manufacturing		144	48	9 010	323 379	6 418	11 595	197 097	1 205 476	1 274 729	2 462 003	90 375
311 3118	Food manufacturing	-	15	8	1 332	48 385	701	1 020	25 187	236 925	153 359	390 689	2 519
3110	Bakeries and tortilla manufacturing	-	6	3	f	D	D	D	D	D	D	D	D
31181	Bread and bakery product manufacturing Commercial bakeries	_	6	3	f	D	D	D	D	D	D	D	D
311812 331	Primary metal manufacturing	_	1 2	1 2	f	D D	D D	D D	D D	D D	D D	D D	D D
332	Fabricated metal product manufacturing	_	31	9	963	38 455	665	1 368	22 350	101 612	60 572	162 600	2 845
3323	Architectural and structural metals manufacturing		11	5	691	30 576	439	939	16 382	75 694	49 375	125 070	D D
333	Machinery manufacturing	_	4	1	f	00 370 D	D	D	D 10 302	73 034 D	43 0/3 D	123 070 D	D
3339	Other general purpose machinery	_	4	'	'	D		Ь		D		Ь	D
33399	manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
333995	machinery manufacturing Fluid power cylinder and actuator manufacturing	-	1	1	f f	D D	D D	D D	D D	D D	D D	D D	D D
334	Computer and electronic product manufacturing	9	3	1	g	D	D	D	D	D	D	D	D
3345	Navigational, measuring,				9	_	_		_			_	
	electromedical, and control instruments manufacturing	9	1	1	g	D	D	D	D	D	D	D	D
33451	Navigational, measuring, electromedical, and control					_	_	_	_	_	_	_	
334510	instruments manufacturing Electromedical and electrotherapeutic apparatus manufacturing	9	1	1	g g	D D	D D	D D	D D	D D	D D	D D	D D
336	Transportation equipment manufacturing		10	7	y h	D	D	D	D	D	D	D	D
3363	Motor vehicle parts							D					
33639	manufacturing Other motor vehicle parts	_	4	4	g	D	D	U	D	D	D	D	D
336399	manufacturing	_	4	4	g g	D D	D D	D D	D D	D D	D D	D D	D D
337	Furniture and related product manufacturing	1	14	4	617	14 903	462	565	7 634	32 668	23 290	56 541	D
	OREM												
31-33	Manufacturing	4	113	20	2 059	67 489	1 408	2 680	36 527	158 484	131 096	288 399	9 673
337	Furniture and related product	1	18	4	558	15 385	439	829	9 387	34 977	23 380	58 429	D
	manufacturing	1 1	18	. 4	558	15 385	4391	829	9 38/	34 9//	∠3 380 1	oo 429	ט

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

	and geographical definitions, see note at		A				-			aming of approvid		,	
			establis	nments ²	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	PAYSON												
31-33	Manufacturing	_	9	4	766	21 664	560	1 079	13 736	68 325	65 163	136 449	D
332	Fabricated metal product manufacturing	_	3	2	f	D	D	D	D	D	D	D	D
3329	Other fabricated metal product manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
33299	All other fabricated metal						D	D				D	D
332999	product manufacturing All other miscellaneous fabricated metal product manufacturing		2	2	, ,	D D	D	D	D D	D D	D D	D	D
	PROVO		_	۷		D						D	
31-33	Manufacturing	1	82	17	1 735	69 585	911	1 712	24 437	152 324	114 412	262 216	45 073
311	Food manufacturing	_	11	3	1 705 f	03 303 D	D	D	D 24 407	132 324 D	D	202 210 D	45 075 D
0	ST. GEORGE			Ü									
31-33	Manufacturing	1	75	19	1 312	38 820	1 039	2 081	26 974	89 743	78 079	168 683	3 299
31-33			/3	19	1 312	30 020	1 039	2 001	20 974	09 743	76 079	100 003	3 299
04.00	SALT LAKE CITY		500	404	04.404	000 000	45 400	00.704	445 000	0.040.000	0.500.004	F 000 000	440 707
31-33 311	Manufacturing	-	508 50	181 21	24 484	966 368	15 100	29 734	445 889	2 618 383	2 582 234	5 298 698	110 787 7 387
3115	Food manufacturing Dairy product manufacturing	1	4	3	2 051 502	62 966 20 378	1 297 266	2 557 634	33 295 10 338	202 113 75 476	267 129 181 133	468 359 255 493	7 387 D
	Daily product mandiacturing			0	302	20 070	200	004	10 000	75 470	101 100	200 400	
3118	Bakeries and tortilla manufacturing	7	23	8	619	17 117	383	749	9 290	54 323	24 265	78 434	2 508
31181	Bread and bakery product manufacturing	7	21	8	f	D	D	D	D	D	D	D	D
315	Apparel manufacturing	-	8	1	f	D	D	D	D	D	D	D	D
3151	Apparel knitting mills	-	1	1	f	D	D	D	D	D	D	D	D
31519 315192	Other apparel knitting mills Underwear and nightwear knitting mills	_	1	1	f f	D D	D D	D D	D D	D D	D D	D D	D D
322	Paper manufacturing	-	7	5	943	34 700	784	1 617	25 359	82 424	110 091	190 807	D
3222	Converted paper product manufacturing	-	7	5	943	34 700	784	1 617	25 359	82 424	110 091	190 807	D
32221	Paperboard container manufacturing	-	4	4	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	1	64	17	1 483	49 397	1 142	2 295	33 203	219 184	74 630	293 620	9 277
3231	Printing and related support activities	1	64	17	1 483	49 397	1 142	2 295	33 203	219 184	74 630	293 620	9 277
32311 323110	Printing Commercial lithographic	1	54	15	1 378	46 483	1 058	2 150	31 339	213 601	73 181	286 525	9 196
005	printing	1	26	5	596	20 974	478	987	15 143	58 294	37 400	95 609	5 376
325 3256	Chemical manufacturing Soap, cleaning compound, and	1	15	8	1 563	66 340	858	1 602	27 507	250 551	215 526	466 889	15 090
	toilet preparation manufacturing.	-	2	1	f	D	D	D	D	D	D	D	D
32561 325611	Soap and cleaning compound manufacturing	-	2	1	f	D	D	D	D	D	D	D	D
326	manufacturing Plastics and rubber products	-	2	1	f	D	D	D	D	D	D	D	D
3261	manufacturing	2	25 23	10 10	1 329 g	39 752 D	1 082 D	2 113 D	27 040 D	91 103 D	83 565 D	173 702 D	4 828 D
32619	Other plastics product												
326199	manufacturing All other plastics product manufacturing	1	15 13	9	1 221 f	36 219 D	995 D	1 942 D	24 663 D	78 269 D	62 354 D	139 554 D	3 801 D
332	Fabricated metal product manufacturing	1	r96	r30	r2 549	r95 439	r1 817	r3 455	r57 604	r196 369	r135 707	r337 188	r6 178
3323	Architectural and structural metals manufacturing	_	43	10	837	33 389	520	955	16 020	58 087	85 788	143 696	2 635
33232	Ornamental and architectural metal products manufacturing	_	25	7	530	22 699	303	558	9 299	38 592	43 372	82 463	905
3329	Other fabricated metal product manufacturing	1	15	3	724	25 023	542	1 025	15 639	73 923	8 910	82 756	1 625
33291 332912	Metal valve manufacturing Fluid power valve and hose fitting manufacturing	- -	2	1	f f	D D	D D	D D	D D	D D	D D	D D	D D

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

terms,	and geographical definitions, see note at	end			ation on geog	graphic areas	followed by *,	see Append	lix D. For mea	ning of abbrevia	ations and symbo	ols, see introduc	tory text]
			establis	III hments ²	All em	ployees	Pro	duction work	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SALT LAKE CITY—Con.												
333	Machinery manufacturing	1	27	11	1 425	61 487	717	1 415	20 820	147 116	95 291	243 199	4 357
3333	Commercial and service industry machinery manufacturing	2	5	2	f	D	D	D	D	D	D	D	D
33331	Commercial and service industry machinery	2	5	2		D	D	D	D	D	D	D	D
333319	manufacturing Other commercial and service industry machinery manufacturing	2	3	2	' f	D	D	D	D	D	D	D	D
334	Computer and electronic product manufacturing	_	31	14	5 916	306 867	2 377	5 088	85 694	683 776	483 668	1 250 213	21 116
3341	Computer and peripheral equipment manufacturing	_	3	2	f	D	D	D	D	D	D	D	D
33411	Computer and peripheral equipment manufacturing	_	3	2	f	D	D	D	D	D	D	D	D
334111	Electronic computer manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	1	10	4	781	23 031	428	727	10 234	31 252	40 508	74 358	842
33441	Semiconductor and other electronic component												
334412	manufacturing	1	10	4	781	23 031	428	727	10 234	31 252	40 508	74 358	842
3345	manufacturing Navigational, measuring,	-	7	3	719	19 602	406	677	9 550	21 994	32 046	56 323	D
	electromedical, and control instruments manufacturing	_	14	6	4 417	245 855	1 796	4 068	70 464	578 065	382 334	1 036 573	16 518
33451	Navigational, measuring, electromedical, and control instruments manufacturing	_	14	6	4 417	245 855	1 796	4 068	70 464	578 065	382 334	1 036 573	16 518
334510 334511	Electromedical and electrotherapeutic apparatus manufacturing	_	3	1	f	D	D	D	D	D	D	D	D
334311	Search, detection, navigation, guidance, aeronautical, and nautical system and instrument												
334517	manufacturing	-	3	2	g f	D	D D	D D	D D	D D	D D	D D	D D
337	manufacturing Furniture and related product	_	2	2	T	D	D	U	J	U		U	U
	manufacturing	-	39	18	1 464	43 998	1 098	2 014	25 918	198 098	133 998	332 191	3 523
3371	Household and institutional furniture and kitchen cabinet manufacturing	1	26	8	604	17 005	442	878	9 762	28 456	34 116	62 704	D
3379	Other furniture related product manufacturing	_	8	7	633	19 406	484	839	10 679	155 759	89 391	245 237	D
339	Miscellaneous manufacturing	1	62	19	3 099	115 587	2 110	4 347	58 481	326 627	214 012	544 125	8 943
3391	Medical equipment and supplies manufacturing	1	22	10	728	37 557	295	594	8 189	160 027	62 814	226 261	4 101
33911	Medical equipment and supplies manufacturing	1	22	10	728	37 557	295	594	8 189	160 027	62 814	226 261	4 101
3399	Other miscellaneous manufacturing	1	40	9	2 371	78 030	1 815	3 753	50 292	166 600	151 198	317 864	4 842
33991	Jewelry and silverware manufacturing	_	5	1	g	D	D	D	D	D	D	D	D
339911	Jewelry (except costume) manufacturing	_	5	1	g	D	D	D	D	D	D	D	D
33992 339920	Sporting and athletic goods manufacturing	3	10	3	644	23 032	403	941	11 689	83 728	25 989	103 388	D
000020	manufacturing	3	10	3	644	23 032	403	941	11 689	83 728	25 989	103 388	D
	SANDY												
31-33	Manufacturing	1	95	12	2 416	95 910	1 518	2 995	45 767	299 529	152 003	446 893	28 341
339 3391	Miscellaneous manufacturing Medical equipment and supplies	_	20	3	1 279	54 328	794	1 674	24 941	170 997	72 676	238 787	D
33911	manufacturing	-	12	3	g	D	D	D	D	D	D	D	D
339112	supplies manufacturing	-	12 1	3 1	g f	D D	D D	D D	D D	D D	D D	D D	D D
	•												

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

1011113, 1	and geographical definitions, see note at	l ciiu			allon on geog	grapriic areas	ollowed by ,	3cc Append	iix D. T OI IIIGE	I III OI ADDIEVI	ations and symbol	ois, see introduc	tory text]
			establis	ll hments ²	All em	ployees	Pro	oduction worl	kers	-			
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	SOUTH JORDAN												
31-33	Manufacturing	5	15	4	1 315	55 153	695	1 275	15 659	123 273	43 211	165 791	D
339	Miscellaneous manufacturing	5	6	2	g	D	D	D	D	D	D	D	D
3391	Medical equipment and supplies manufacturing	5	5	2	g	D	D	D	D	D	D	D	D
33911	Medical equipment and supplies manufacturing	5	5	2	g	D	D	D	D	D	D	D	D
339112	Surgical and medical instrument manufacturing	9	1	1	g f	D	D	D	D	D	D	D	D
339114	Dental equipment and supplies manufacturing	_	1	1	· ,	D	D	D	D	D	D	D	D
						D		D					D
	SOUTH SALT LAKE												
31-33	Manufacturing		153	40	3 257	113 572	2 226	4 090	63 776	271 963	203 507	476 371	15 930
311	Food manufacturing	1	12	5	772	25 681	509	940	13 087	81 809	60 832	141 587	6 003
3118	Bakeries and tortilla manufacturing	-	6	3	540	19 197	304	467	7 853	57 393	24 392	80 488	D
31181	Bread and bakery product manufacturing	-	5	3	f	D	D	D	D	D	D	D	D
323	Printing and related support activities	4	29	7	517	18 475	341	618	10 158	34 228	20 214	54 613	2 759
3231	Printing and related support activities	4	29	7	517	18 475	341	618	10 158	34 228	20 214	54 613	2 759
	SPANISH FORK												
31-33	Manufacturing	1	32	10	1 662	66 604	788	1 679	21 229	135 825	155 312	287 610	9 614
325	Chemical manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
3254	Pharmaceutical and medicine manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
32541	Pharmaceutical and medicine					_	_	_	_	_	_	_	
325412	manufacturing Pharmaceutical preparation	-	1	1	f	D	D	D	D	D	D	D	D
	manufacturing	-	1	1	f	D	D	D	D	D	D	D	D
	SPRINGVILLE												
31-33	Manufacturing	2	44	17	3 676	120 907	2 381	4 767	67 039	291 717	373 670	663 457	28 549
311	Food manufacturing	-	2	1	g	D	D	D	D	D	D	D	D
3114	Fruit and vegetable preserving and specialty food manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
31141	Frozen food manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
311412	Frozen specialty food manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
325	Chemical manufacturing	7		5	681	36 152	419	791	17 046	114 644	47 381	162 582	16 901
	TREMONTON			_									
31-33	Manufacturing	-	10	6	1 613	51 876	1 402	3 030	42 460	101 814	152 948	258 126	11 014
337	Furniture and related product manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
3371	Household and institutional												
	furniture and kitchen cabinet manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
33712	Household and institutional					_	_	_	_	_	_	_	_
337121	furniture manufacturing Upholstered household	_	1	1	g	D	D	D	D	D	D	D	D
	furniture manufacturing	-	1	1	g	D	D	D	D	D	D	D	D
	WEST JORDAN												
31-33	Manufacturing	_	99	38	3 239	110 745	2 546	4 785	76 424	332 790	311 021	611 728	41 434
334	Computer and electronic product manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	_	2	2	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component												
337	manufacturing Furniture and related product	-	2	2	f	D 15 880	D	D 843	D 12 248	D 42 501	D 20 127	D 64 220	D
	manufacturing	1	16	5	520	15 889	442	843	12 248	43 581	20 137	64 220	D

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

terms,	and geographical definitions, see note at	end	of table. I	For inform	ation on geo	graphic areas t	followed by *,	see Append	lix D. For mea	ning of abbrevia	ations and symbo	ols, see introduc	tory text]
			A establisl	.ll nments ²	All em	ployees	Pro	oduction worl	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	WEST VALLEY CITY												
31-33	Manufacturing	1	170	58	6 220	253 495	3 458	6 922	113 037	654 820	498 091	1 147 532	31 592
323	Printing and related support activities	2	37	11	848	27 748	550	1 091	16 798	53 195	34 928	87 865	2 668
3231	Printing and related support activities	2	37	11	848	27 748	550	1 091	16 798	53 195	34 928	87 865	2 668
32311	Printing	2	30	10	734	24 784	452	910	14 645	47 800	32 964	80 506	2 227
334	Computer and electronic product manufacturing	2	12	8	919	37 479	448	619	12 345	44 056	30 244	71 239	4 463
3342	Communications equipment manufacturing	1	2	2	f	D	D	D	D	D	D	D	D
336	Transportation equipment manufacturing	_	3	1	g	D	D	D	D	D	D	D	D
3364	Aerospace product and parts manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
33641	Aerospace product and parts manufacturing	_	1	1	g	D	D	D	D	D	D	D	D
336415	Guided missile and space vehicle propulsion unit and propulsion unit parts		·		9			_				5	J
339	manufacturing Miscellaneous manufacturing	_	1 20	1	513	D 14 533	D 375	D 835	D 9 143	D 41 664	D 14 618	D 56 350	D 1 431
	BALANCE OF BOX ELDER COUNTY												
31-33	Manufacturing	_	28	4	879	44 704	753	1 318	36 341	168 661	187 269	359 292	4 110
	BALANCE OF CACHE					-							
31-33	COUNTY Manufacturing	_	34	10	2 503	67 750	2 217	4 798	53 065	267 003	820 934	1 094 163	5 550
311	Food manufacturing	_	13	6	g 2 303	07 730 D	D D	4 730 D	D 000	207 000 D	D	D D	3 602
3116	Animal slaughtering and processing	_	2	2	g	D	D	D	D	D	D	D	D
31161	Animal slaughtering and processing	_	2	2	g	D	D	D	D	D	D	D	D
311611	Animal (except poultry) slaughtering	_	1	1	g 9	D	D	D	D	D	D	D	D
	BALANCE OF SALT LAKE COUNTY												
31-33	Manufacturing	_	126	27	2 990	114 271	1 867	3 633	62 374	713 483	1 193 436	1 905 218	49 085
331	Primary metal manufacturing	-	2	2	f	D	D	D	D	D	D	D	D
3314	Nonferrous metal (except aluminum) production and processing	_	2	2	f	D	D	D	D	D	D	D	D
33141	Nonferrous metal (except aluminum) smelting and		2	2	f	D	D	D	D	D	D	D	D
331411	refining Primary smelting and refining of copper	_	2	2	f	D	D	D	D	D	D	D	D
	BALANCE OF SANPETE COUNTY												
31-33	Manufacturing	1	12	6	946	17 706	753	1 208	11 162	39 738	59 583	95 959	D
311	Food manufacturing	-	5	2	f	D	D	D	D	D	D	D	D
3116	Animal slaughtering and processing	-	2	1	f	D	D	D	D	D	D	D	D
31161 311615	Animal slaughtering and processing Poultry processing	_	2	1	f	D D	D D	D D	D D	D D	D D	D D	D D
01.0.0	BALANCE OF UTAH COUNTY		·		·							J	
31-33	Manufacturing	_	29	8	1 349	52 292	1 060	1 389	35 288	503 080	96 914	571 810	23 675
334	Computer and electronic product manufacturing	_	2	1	f	D	D	D	D	D	D	D	D
3344	Semiconductor and other electronic component manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
33441	Semiconductor and other electronic component												
334413	manufacturing	-	1	1 1	f f	D D	D D	D D	D D	D D	D D	D D	D D

[Includes data for industry groups and industries with 500 employees or more. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

			All establishments ²		All employees		Pro	oduction wor	kers				
NAICS code	Geographic area and industry	E¹	Total	With 20 em- ploy- ees or more	Number ³	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)	Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
	BALANCE OF WEBER COUNTY												
31-33	Manufacturing	_	27	13	2 117	71 776	1 753	2 929	52 376	479 836	225 125	709 445	17 419
322	Paper manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
3222	Converted paper product manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
32229 322291	Other converted paper product manufacturing	_	1	1	f	D	D	D	D	D	D	D	D
322291	Sanitary paper product manufacturing	_	1	1	f	D	D	D	D	D	D	D	D

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data based on administrative-record data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

sy percent; 9–90 percent or more.

*Includes establishments with payroll at any time during the year.

*Industries with 500 employees or more are shown. Some statistics are withheld to avoid disclosing data for individual companies. If employment is 500 or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: f-500 to 999 employees; g-1,000 to 2,499 employees, h-2,500 to 49,999 employees; i-5,000 to 99,999 employees; i-50,000 to 99,999 employees; m-100,000 employees or more.

*Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Table 5. Detailed Statistics for the State: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
UTAH	
Companies ¹ number	N
All establishments ²	3 061 2 243 600 218
All employees³ number. Total compensation \$1,000. Annual payroll \$1,000. Total fringe benefits \$1,000.	109 944 4 963 793 4 001 272 962 521
Production workers, average for year	73 961 73 862 73 856 74 055 73 894
Production worker hours	142 385 2 156 682
Total cost of materials \$1,000. Materials, parts, containers, packaging, etc., used \$1,000. Resales \$1,000. Purchased fuels \$1,000. Purchased electricity \$1,000. Contract work \$1,000.	12 900 605 11 482 405 926 421 126 891 197 152 167 736
Quantity of electricity purchased for heat and power	4 796 044 D
Total value of shipments \$1,000. Value of resales \$1,000.	25 104 045 '1 129 567
Value added	12 158 925
Total inventories, beginning of year \$1,000. Finished goods inventories \$1,000. Work-in-process inventories \$1,000. Materials and supplies inventories \$1,000.	'2 709 860 '1 042 018 '759 153 '908 689
Total inventories, end of year \$1,000. Finished goods inventories \$1,000. Work-in-process inventories \$1,000. Materials and supplies inventories \$1,000.	'2 652 258 '1 096 427 '664 963 '890 868
Gross value of depreciable assets (acquisition costs) at beginning of year \$1,000. Total capital expenditures (new and used) \$1,000. Buildings and other structures (new and used) \$1,000. Machinery and equipment (new and used) \$1,000. Automobiles, trucks, etc., for highway use \$1,000. Computers and peripheral data processing equipment \$1,000. All other expenditures for machinery and equipment \$1,000. Total retirements \$1,000. Gross value of depreciable assets at end of year \$1,000.	10 295 118 786 006 137 826 648 180 21 588 54 927 571 685 464 872 10 616 252
Depreciation charges during year\$1,000	949 697
Total rental payments \$1,000. Buildings and other structures \$1,000. Machinery and equipment \$1,000.	278 035 149 385 128 650

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Appendix A. Explanation of Terms

COMPANY

A company or "enterprise" is comprised of all the establishments that operate under the owner-ship or control of a single organization. A company may be a business, service, or membership organization; consist of one or several establishments; and operate at one or several locations. It includes all subsidiary organizations, all establishments that are majority-owned by the company or any subsidiary, and all the establishments that can be directed or managed by the company or any subsidiary.

A company may have one or many establishments. Examples include product and service sales offices (retail and wholesale), industrial production plants, processing or assembly operations, mines or well sites, and support operations (such as an administrative office, warehouse, customer service center, or regional headquarters). Each establishment should receive, complete, and return a separate census form.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

Establishment

An establishment is a single physical location where business is conducted or where services or industrial operations are performed. Data in this sector includes those establishments where manufacturing is performed. A separate report was required for each manufacturing establishment (plant) with one employee or more that was in operation at any time during the year.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating manufacturing establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' total supplemental labor costs (those required by federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

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TOTAL FRINGE BENEFITS

This item is the employer's costs for social security tax, unemployment tax, workmen's compensation insurance, state disability insurance pension plans, stock purchase plans, union-negotiated benefits, life insurance premiums, and insurance premiums on hospital and medical plans for employees.

Fringe benefits are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation, whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees.

NUMBER OF EMPLOYEES

This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period that included the 12th of the months specified on the report form. Included are employees on paid sick leave, paid holidays, and paid vacations; not included are proprietors and partners of unincorporated businesses.

These individuals consist of all full-time and part-time employees who are on the payrolls of establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November.

The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November

Production Workers

The "production workers" number includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, ware-housing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All Other Employees

The "other employees" covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force.

PRODUCTION-WORKER HOURS

This item covers all hours worked or paid for at the manufacturing plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the establishment.

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COST OF MATERIALS

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

Included in this item are:

- 1. Cost of parts, components, containers, etc. Includes all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year.
- 2. Cost of products bought and sold in the same condition.
- Cost of fuels consumed for heat and power. Includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.
- 4. Cost of purchased electricity. The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
- 5. Cost of contract work. This term applies to work done by others on materials furnished by the manufacturing establishment. The actual cost of the material is to be reported on the cost of materials, parts, and containers line of this item. The term "Contract Work" refers to the fee a company pays to another company to perform a service.

Specific materials consumed

In addition to the total cost of materials, which every establishment was required to report, information also was collected for most manufacturing industries on the consumption of major materials used in manufacturing. The inquiries were restricted to those materials that were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. If less than \$25,000 of a listed material was consumed by an establishment, the cost data could be reported in the "Cost of all other materials" Census material code 00970099.

Also, the cost of materials for small establishments for which administrative records or short forms were used was imputed into the "Materials not specified by kind" Census materials code 00971000.

QUANTITY OF ELECTRICITY PURCHASED FOR HEAT AND POWER

Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the Annual Survey of Manufactures (ASM) form. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

TOTAL VALUE OF SHIPMENTS

Includes the received or receivable net selling values, "Free on Board" (FOB) plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all

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items made by or for the establishments from material owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of "all other costs" (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment's value of product shipments:

- 1. reported contract work receipts for work or services that a plant performed for others on their materials;
- 2. value of resales sales of products bought and sold without further manufacture, processing, or assembly; and
- 3. other miscellaneous receipts includes repair work, installation, sales of scrap, etc.

Industry primary product value of shipments represents one of three components of value of shipments. These components are:

- 1. primary product value of shipments;
- 2. secondary product value of shipments; and
- 3. total miscellaneous receipts.

Primary product shipments is used in the calculations of industry specialization ratio and industry coverage ratio.

Duplication in cost of materials and value of shipment

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication, since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to the paper manufacturing group of industries.

Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries that included considerable duplication. Since then, these data have been published for all industries at the U.S. level and beginning in 1964, for all geographic levels.

Specialization and coverage ratio

An establishment is classified in a particular industry, if its shipments of primary products of that industry exceed in value its shipments of the products of any other single industry.

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An establishment's shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.).

Specialization and coverage ratio have been developed to measure the relationship of primary product shipments to the data on shipments for a particular industry.

Specialization ratio represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments wherever classified.

VALUE ADDED

This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments, value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

"Value added" avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

TOTAL END-OF-YEAR INVENTORIES

This item is comprised of:

- a. Finished products
- b. Work-in-process
- c. Materials, supplies, fuels, etc.

Beginning in 1982, respondents were asked to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method. Therefore, 1982 through 2002 data for inventories are not strictly comparable to prior-year data.

In addition, total beginning-of-year inventories is the sum of several different types of inventory valuations.

Inventory valuations include:

- 1. Subject to Last-in, first-out (LIFO) costing (including LIFO reserve and value)
- 2. Not subject to LIFO costing
- 3. Valuation method not reported, and
- 4. Amount subject to LIFO reported without associated reserve and value.

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GROSS VALUE OF DEPRECIABLE/DEPLETABLE ASSETS AT BEGINNING OF YEAR

Gross value of depreciable/depletable assets includes all fixed depreciable/depletable assets contained in accounting records of establishments. The values shown (gross book value) represent the actual cost of assets at the time they were acquired. Included are all costs incurred in making the assets usable (such as transportation and installation)

Gross value of depreciable/depletable assets includes:

- 1. Buildings and other structures (new and used).
- 2. Machinery and equipment (new and used), including automobiles, trucks, etc. for highway use and computers and peripheral data processing equipment.
- 3. Retirements.

Excluded are nondepreciable capital assets including inventories and intangible assets.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

CAPITAL EXPENDITURES FOR NEW AND USED PLANT AND EQUIPMENT

Represents the total new and used capital expenditures reported by establishments in operation and any known plants under construction.

These data include expenditures for:

- 1. Permanent additions and major alterations to manufacturing and mining establishments.
- 2. New and used machinery and equipment used for replacement and additions to plant capacity, if they are of the type for which depreciation, depletion, or (for mining establishments) Office of Minerals Exploration accounts are ordinarily maintained. In addition, for mining establishments, these data include expenditures made during the year for development and exploration of mineral properties. For manufacturing establishments, these data are broken down into three types.
 - a. Automobiles, trucks, etc. for highway use. These include vehicles acquired under a lease-purchase agreement and excludes vehicles leased or normally designed to transport materials, property, or equipment on mining, construction, petroleum development, and similar projects. These vehicles are of such size or weight as to be normally restricted by state laws or regulations from operating on public highways. It also excludes purchases of vehicles that are purchased by a company for highway use.
 - b. Computers and peripheral data processing equipment. This item includes all purchases of computers and related equipment.
 - c. All other expenditures for machinery and equipment excluding automobiles and computer equipment.

Capital expenditures include work done by contract, as well as by the establishment's own work-force.

These data exclude expenditures for land and mineral rights and cost of maintenance and repairs charged as current operating expenses.

RETIREMENTS OF DEPRECIABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during the calendar year. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

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RENTAL PAYMENTS

Total rental payments are collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments.

However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

DEPRECIATION CHARGES FOR FIXED ASSETS

This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.

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Appendix B. NAICS Codes, Titles, and Descriptions

SECTOR 31-33 MANUFACTURING

The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.

The materials, substances, or components transformed by manufacturing establishments are raw materials that are products of agriculture, forestry, fishing, mining, or quarrying as well as products of other manufacturing establishments. The materials used may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another, under the same ownership. The new product of a manufacturing establishment may be finished in the sense that it is ready for utilization or consumption, or it may be semifinished to become an input for an establishment engaged in further manufacturing. For example, the product of the alumina refinery is the input used in the primary production of aluminum; primary aluminum is the input to an aluminum wire drawing plant; and aluminum wire is the input for a fabricated wire product manufacturing establishment.

The subsectors in the Manufacturing sector generally reflect distinct production processes related to material inputs, production equipment, and employee skills. In the machinery area, where assembling is a key activity, parts and accessories for manufactured products are classified in the industry of the finished manufactured item when they are made for separate sale. For example, a replacement refrigerator door would be classified with refrigerators and an attachment for a piece of metal working machinery would be classified with metal working machinery. However, components, input from other manufacturing establishments, are classified based on the production function of the component manufacturer. For example, electronic components are classified in Subsector 334, Computer and Electronic Product Manufacturing and stampings are classified in Subsector 332, Fabricated Metal Product Manufacturing.

Manufacturing establishments often perform one or more activities that are classified outside the Manufacturing sector of NAICS. For instance, almost all manufacturing has some captive research and development or administrative operations, such as accounting, payroll, or management. These captive services are treated the same as captive manufacturing activities. When the services are provided by separate establishments, they are classified to the NAICS sector where such services are primary, not in manufacturing.

The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. The establishments in the manufacturing sector are engaged in the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in NAICS: Milk bottling and pasteurizing; Water bottling and processing;

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Fresh fish packaging (oyster shucking, fish filleting); Apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others; Printing and related activities; Ready-mixed concrete production; Leather converting; Grinding of lenses to prescription; Wood preserving; Electroplating, plating, metal heat treating, and polishing for the trade; Lapidary work for the trade; Fabricating signs and advertising displays; Rebuilding or remanufacturing machinery (i.e., automotive parts) Ship repair and renovation; Machine shops; and Tire retreading. Conversely, there are activities that are sometimes considered manufacturing, but which for NAICS are classified in another sector (i.e., not classified as manufacturing).

They include: (1) Logging, classified in Sector 11, Agriculture, Forestry, Fishing and Hunting is considered a harvesting operation; (2) The beneficiating of ores and other minerals, classified in Sector 21, Mining, is considered part of the activity of mining; (3) The construction of structures and fabricating operations performed at the site of construction by contractors, is classified in Sector 23, Construction; (4) Establishments engaged in breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products, such as liquors or chemicals; the customized assembly of computers; sorting of scrap; mixing paints to customer order; and cutting metals to customer order, classified in Sector 42, Wholesale Trade or Sector 44-45, Retail Trade, produce a modified version of the same product, not a new product; and (5) Publishing and the combined activity of publishing and printing, classified in Sector 51, Information, perform the transformation of information into a product where as the value of the product to the consumer lies in the information content, not in the format in which it is distributed (i.e., the book or software diskette).

311 FOOD MANUFACTURING

Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption. The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products.

The food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.

Establishments primarily engaged in manufacturing beverages are classified in Subsector 312, Beverage and Tobacco Product Manufacturing.

3111 ANIMAL FOOD MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

31111 ANIMAL FOOD MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing food and feed for animals from ingredients, such as grains, oilseed mill products, and meat products.

311111 DOG AND CAT FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dog and cat food from ingredients, such as grains, oilseed mill products, and meat products.

311119 OTHER ANIMAL FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.

3112 GRAIN AND OILSEED MILLING

This industry group comprises establishments primarily engaged in one or more of the following:

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- 1. Milling flour or meal from grains or vegetables;
- 2. Preparing flour mixes or doughs from flour milled in the same establishment;
- 3. Milling, cleaning, and polishing rice; and
- 4. Manufacturing malt from barley, rye, or other grains.

31121 FLOUR MILLING AND MALT MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. Milling flour or meal from grains or vegetables
- 2. Preparing flour mixes or doughs from flour milled in the same establishment
- 3. Milling, cleaning, and polishing rice; and
- 4. Manufacturing malt from barley, rye, or other grains.

311211 FLOUR MILLING

This U.S. industry comprises establishments primarily engaged in the following:

- 1. Milling flour or meal from grains (except rice) or vegetables and/or
- 2. Milling flour and preparing flour mixes or doughs.

311212 RICE MILLING

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. milling rice;
- 2. cleaning and polishing rice; or
- 3. milling, cleaning, and polishing rice.

The establishments in this industry may package the rice they mill with other ingredients.

311213 MALT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing malt from barley, rye, or other grains.

31122 STARCH AND VEGETABLE FATS AND OILS MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. Wet milling corn and vegetables;
- 2. Crushing oilseeds and tree nuts;
- 3. Refining and/or blending vegetable oils;
- 4. Manufacturing shortening and margarine; and
- 5. Blending purchased animal fats with vegetable fats.

311221 WET CORN MILLING

This U.S. industry comprises establishments primarily engaged in wet milling corn and other vegetables (except to make ethyl alcohol). Examples of products made in these establishments are corn sweeteners, such as glucose, dextrose, and fructose; corn oil; and starches (except laundry).

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311222 SOYBEAN PROCESSING

This U.S. industry comprises establishments engaged in crushing soybeans. Examples of products produced in these establishments are soybean oil, soybean cake and meal, and soybean protein isolates and concentrates.

311223 OTHER OILSEED PROCESSING

This U.S. industry comprises establishments engaged in crushing oilseeds (except soybeans) and tree nuts, such as cottonseeds, linseeds, peanuts, and sunflower seeds.

311225 FATS AND OILS REFINING AND BLENDING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. Manufacturing shortening and margarine from purchased fats and oils;
- 2. Refining and/or blending vegetable, oilseed, and tree nut oils from purchased oils; and
- 3. Blending purchased animal fats with purchased vegetable fats.

31123 BREAKFAST CEREAL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

311230 BREAKFAST CEREAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing breakfast cereal foods.

3113 SUGAR AND CONFECTIONERY PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in one of the following:

- 1. Process agricultural inputs, such as sugarcane, beet, and cacao, to give rise to a new product (sugar or chocolate), and
- 2. Those that begin with sugar and chocolate and process these further.

31131 SUGAR MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing raw sugar, liquid sugar, and refined sugar from sugarcane, raw cane sugar and sugarbeets.

311311 SUGARCANE MILLS

This U.S. industry comprises establishments primarily engaged in processing sugarcane.

311312 CANE SUGAR REFINING

This U.S. industry comprises establishments primarily engaged in refining cane sugar from raw cane sugar.

311313 BEET SUGAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing refined beet sugar from sugarbeets.

31132 CHOCOLATE AND CONFECTIONERY MANUFACTURING FROM CACAO BEANS

This industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

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311320 CHOCOLATE AND CONFECTIONERY MANUFACTURING FROM CACAO BEANS

This U.S. industry comprises establishments primarily engaged in shelling, roasting, and grinding cacao beans and making chocolate cacao products and chocolate confectioneries.

31133 CONFECTIONERY MANUFACTURING FROM PURCHASED CHOCOLATE

This industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

311330 CONFECTIONERY MANUFACTURING FROM PURCHASED CHOCOLATE

This U.S. industry comprises establishments primarily engaged in manufacturing chocolate confectioneries from chocolate produced elsewhere. Included in this industry are establishments primarily engaged in retailing chocolate confectionery products not for immediate consumption made on the premises from chocolate made elsewhere.

31134 NONCHOCOLATE CONFECTIONERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing nonchocolate confectionery products not for immediate consumption made on the premises.

311340 NONCHOCOLATE CONFECTIONERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonchocolate confectioneries. Included in this industry are establishments primary engaged in retailing non-chocolate confectionery products not for immediate consumption made on the premises.

3114 FRUIT AND VEGETABLE PRESERVING AND SPECIALTY FOOD MANUFACTURING

This industry group comprises establishments primarily engaged in the following:

- 1. Those that freeze food and
- 2. Those that use preservation processes, such as pickling, canning, and dehydrating.

Both types begin their production process with inputs of vegetable or animal origin.

31141 FROZEN FOOD MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing frozen fruit, frozen juices, frozen vegetables, and frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped toppings; and frozen waffles, pancakes, and french toast.

311411 FROZEN FRUIT, JUICE, AND VEGETABLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing frozen fruits; frozen vegetables; and frozen fruit juices, ades, drinks, cocktail mixes and concentrates.

311412 FROZEN SPECIALTY FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing frozen specialty foods (except seafood), such as frozen dinners, entrees, and side dishes; frozen pizza; frozen whipped topping; and frozen waffles, pancakes, and french toast.

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31142 FRUIT AND VEGETABLE CANNING, PICKLING, AND DRYING

This industry comprises establishments primarily engaged in manufacturing canned, pickled, and dried fruits, vegetables, and specialty foods. Establishments in this industry may package the dried or dehydrated ingredients they make with other purchased ingredients. Examples of products made by these establishments are canned juices; canned baby foods; canned soups (except seafood); canned dry beans; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste, pickles, relishes, jams and jellies, dried soup mixes and bullions, and sauerkraut.

311421 FRUIT AND VEGETABLE CANNING

This U.S. industry comprises establishments primarily engaged in manufacturing canned, pickled, and brined fruits and vegetables. Examples of products made in these establishments are canned juices; canned jams and jellies; canned tomato-based sauces, such as catsup, salsa, chili, spaghetti, barbeque, and tomato paste; pickles, relishes, and sauerkraut.

311422 SPECIALTY CANNING

This U.S. industry comprises establishments primarily engaged in manufacturing canned specialty foods. Examples of products made in these establishments are canned baby food, canned baked beans, canned soups (except seafood), canned spaghetti, and other canned nationality foods.

311423 DRIED AND DEHYDRATED FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. Drying (including freeze-dried) and/or dehydrating fruits, vegetables, and soup mixes and bouillon and/or
- 2. Drying and/or dehydrating ingredients and packaging them with other purchased ingredients, such as rice and dry pasta.

3115 DAIRY PRODUCT MANUFACTURING

This industry group comprises establishments that manufacture dairy products from raw milk, processed milk, and dairy substitutes.

31151 DAIRY PRODUCT (EXCEPT FROZEN) MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. Manufacturing dairy products (except frozen) from raw milk and/or processed milk products;
- 2. Manufacturing dairy substitutes (except frozen) from soybeans and other nondairy substances; and
- 3. Manufacturing dry, condensed, concentrated, and evaporated dairy and dairy substitute products.

311511 FLUID MILK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. Manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or
- 2. Manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.

311512 CREAMERY BUTTER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing creamery butter from milk and/or processed milk products.

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311513 CHEESE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- manufacturing cheese products (except cottage cheese) from raw milk and/or processed milk products and/or
- 2. manufacturing cheese substitutes from soybean and other nondairy substances.

311514 DRY, CONDENSED, AND EVAPORATED DAIRY PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.

31152 ICE CREAM AND FROZEN DESSERT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

311520 ICE CREAM AND FROZEN DESSERT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ice cream, frozen yogurts, frozen ices, sherbets, frozen tofu, and other frozen desserts (except bakery products).

3116 ANIMAL SLAUGHTERING AND PROCESSING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Slaughtering animals;
- 2. Preparing processed meats and meat byproducts; and
- 3. Rendering and/or refining animal fat, bones, and meat scraps.

This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

31161 ANIMAL SLAUGHTERING AND PROCESSING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. Slaughtering animals;
- 2. Preparing processed meats and meat byproducts; and
- 3. Rendering and/or refining animal fat, bones, and meat scraps.

This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased carcasses.

311611 ANIMAL (EXCEPT POULTRY) SLAUGHTERING

This U.S. industry comprises establishments primarily engaged in slaughtering animals (except poultry and small game). Establishments that slaughter and prepare meats are included in this industry.

311612 MEAT PROCESSED FROM CARCASSES

This U.S. industry comprises establishments primarily engaged in processing or preserving meat and meat byproducts (except poultry and small game) from purchased meats. This industry includes establishments primarily engaged in assembly cutting and packing of meats (i.e., boxed meats) from purchased meats.

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311613 RENDERING AND MEAT BYPRODUCT PROCESSING

This U.S. industry comprises establishments primarily engaged in rendering animal fat, bones, and meat scraps.

311615 POULTRY PROCESSING

This U.S. industry comprises establishments primarily engaged in:

- 1. slaughtering poultry and small game and/or
- 2. preparing processed poultry and small game meat and meat byproducts.

3117 SEAFOOD PRODUCT PREPARATION AND PACKAGING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Canning seafood (including soup);
- 2. Smoking, salting, and drying seafood;
- 3. Eviscerating fresh fish by removing heads, fins, scales, bones, and entrails;
- 4. Shucking and packing fresh shellfish;
- 5. Processing marine fats and oils; and
- 6. Freezing seafood.

Establishments known as "floating factory ships" that are engaged in the gathering and processing of seafood into canned seafood products are also included in this industry group.

31171 SEAFOOD PRODUCT PREPARATION AND PACKAGING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. Canning seafood (including soup);
- 2. Smoking, salting, and drying seafood;
- 3. Eviscerating fresh fish by removing heads, fins, scales, bones, and entrails;
- 4. Shucking and packing fresh shellfish;
- 5. Processing marine fats and oils; and
- 6. Freezing seafood.

Establishments known as "floating factory ships" that are engaged in the gathering and processing of seafood into canned seafood products are also included in this industry.

311711 SEAFOOD CANNING

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. Canning seafood (including soup) and marine fats and oils and/or
- 2. Smoking, salting, and drying seafood.

Establishments known as "floating factory ships" that are engaged in the gathering and processing of seafood into canned seafood products are also included in this industry.

311712 FRESH AND FROZEN SEAFOOD PROCESSING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. Eviscerating fresh fish by removing heads, fins, scales, bones, and entrails;
- 2. Shucking and packing fresh shellfish;

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- 3. Manufacturing frozen seafood; and
- 4. Processing fresh and frozen marine fats and oils.

3118 BAKERIES AND TORTILLA MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Bread and bakery product manufacturing;
- 2. Cookie, cracker, and pasta manufacturing; and
- 3. Tortilla manufacturing.

31181 BREAD AND BAKERY PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and other bakery products.

311811 RETAIL BAKERIES

This U.S. industry comprises establishments primarily engaged in retailing bread and other bakery products not for immediate consumption made on the premises from flour, not from prepared dough.

311812 COMMERCIAL BAKERIES

This U.S. industry comprises establishments primarily engaged in manufacturing fresh and frozen bread and bread-type rolls and other fresh bakery (except cookies and crackers) products.

311813 FROZEN CAKES, PIES, AND OTHER PASTRIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing frozen bakery products (except bread), such as cakes, pies, and doughnuts.

31182 COOKIE, CRACKER, AND PASTA MANUFACTURING

This industry comprises establishments primarily engaged in one of the following:

- 1. Manufacturing cookies and crackers;
- 2. Preparing flour and dough mixes and dough from flour ground elsewhere; and
- 3. Manufacturing dry pasta.

The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 COOKIE AND CRACKER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

311822 FLOUR MIXES AND DOUGH MANUFACTURING FROM PURCHASED FLOUR

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

311823 DRY PASTA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

311821 COOKIE AND CRACKER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cookies, crackers, and other products, such as ice cream cones.

311822 FLOUR MIXES AND DOUGH MANUFACTURING FROM PURCHASED FLOUR

This U.S. industry comprises establishments primarily engaged in manufacturing prepared flour mixes or dough mixes from flour ground elsewhere.

311823 DRY PASTA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dry pasta. The establishments in this industry may package the dry pasta they manufacture with other ingredients.

31183 TORTILLA MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing tortillas.

311830 TORTILLA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing tortillas.

3119 OTHER FOOD MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruit, vegetable, and specialty foods; dairy products; meat products; seafood products; and bakeries and tortillas). The industry group includes industries with different productive processes, such as snack food manufacturing; coffee and tea manufacturing; concentrate, syrup, condiment, and spice manufacturing; and, in general, an entire range of other miscellaneous food product manufacturing.

31191 SNACK FOOD MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. Salting, roasting, drying, cooking, or canning nuts;
- 2. Processing grains or seeds into snacks;
- 3. Manufacturing peanut butter; and
- 4. Manufacturing potato chips, corn chips, popped popcorn, pretzels (except soft), pork rinds, and similar snacks.

311911 ROASTED NUTS AND PEANUT BUTTER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. Salting, roasting, drying, cooking, or canning nuts;
- 2. Processing grains or seeds into snacks; and
- 3. Manufacturing peanut butter.

311919 OTHER SNACK FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing snack foods (except roasted nuts and peanut butter).

31192 COFFEE AND TEA MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

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- 1. Roasting coffee;
- 2. Manufacturing coffee and tea concentrates (including instant and freeze-dried);
- 3. Blending tea;
- 4. Manufacturing herbal tea; and
- 5. Manufacturing coffee extracts, flavorings, and syrups.

311920 COFFEE AND TEA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. Roasting coffee;
- 2. Manufacturing coffee and tea concentrates (including instant and freeze-dried);
- 3. Blending tea;
- 4. Manufacturing herbal tea; and
- 5. Manufacturing coffee extracts, flavorings, and syrups.

31193 FLAVORING SYRUP AND CONCENTRATE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

311930 FLAVORING SYRUP AND CONCENTRATE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing flavoring syrup drink concentrates and related products for soda fountain use or for the manufacture of soft drinks.

31194 SEASONING AND DRESSING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. Manufacturing dressings and sauces, such as mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravies);
- 2. Manufacturing spices, table salt, seasoning, and flavoring extracts (except coffee and meat), and natural food colorings; and
- 3. Manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

311941 MAYONNAISE, DRESSING, AND OTHER PREPARED SAUCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing mayonnaise, salad dressing, vinegar, mustard, horseradish, soy sauce, tarter sauce, Worcestershire sauce, and other prepared sauces (except tomato-based and gravy).

311942 SPICE AND EXTRACT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. Manufacturing spices, table salt, seasonings, flavoring extracts (except coffee and meat), and natural food colorings and/or
- 2. Manufacturing dry mix food preparations, such as salad dressing mixes, gravy and sauce mixes, frosting mixes, and other dry mix preparations.

31199 ALL OTHER FOOD MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakeries and tortillas; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings; and dressings). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

311991 PERISHABLE PREPARED FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing perishable prepared foods, such as salads, sandwiches, prepared meals, fresh pizza, fresh pasta, and peeled or cut vegetables.

311999 ALL OTHER MISCELLANEOUS FOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing food (except animal food; grain and oilseed milling; sugar and confectionery products; preserved fruits, vegetables, and specialties; dairy products; meat products; seafood products; bakery and tortillas products; snack foods; coffee and tea; flavoring syrups and concentrates; seasonings and dressings; and perishable prepared food). Included in this industry are establishments primarily engaged in mixing purchased dried and/or dehydrated ingredients including those mixing purchased dried and/or dehydrated ingredients for soup mixes and bouillon.

312 BEVERAGE AND TOBACCO PRODUCT MANUFACTURING

Industries in the Beverage and Tobacco Product Manufacturing subsector manufacture beverages and tobacco products. The industry group, Beverage Manufacturing, includes three types of establishments:

- 1. Those that manufacture nonalcoholic beverages;
- 2. Those that manufacture alcoholic beverages through the fermentation process; and
- 3. Those that produce distilled alcoholic beverages.

Ice manufacturing, while not a beverage, is included with nonalcoholic beverage manufacturing because it uses the same production process as water purification.

In the case of activities related to the manufacture of beverages, the structure follows the defined productive processes. Brandy, a distilled beverage, was not placed under distillery product manufacturing, but rather under the NAICS class for winery product manufacturing since the productive process used in the manufacturing of alcoholic grape-based beverages produces both wines (fermented beverage) and brandies (distilled beverage).

The industry group, Tobacco Manufacturing, includes two types of establishments:

- 1. Those engaged in redrying and stemming tobacco and,
- 2. Those that manufacture tobacco products, such as cigarettes and cigars.

3121 BEVERAGE MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing soft drinks; ice; bottled water; breweries; wineries; and/or distilleries.

31211 SOFT DRINK AND ICE MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

1. Manufacturing soft drinks;

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- 2. Manufacturing ice; and
- 3. Purifying and bottling water.

312111 SOFT DRINK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing soft drinks and artificially carbonated waters.

312112 BOTTLED WATER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in purifying and bottling water (including naturally carbonated).

312113 ICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ice.

31212 BREWERIES

This industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

312120 BREWERIES

This U.S. industry comprises establishments primarily engaged in brewing beer, ale, malt liquors, and nonalcoholic beer.

31213 WINERIES

This industry comprises establishments primarily engaged in one or more of the following:

- 1. Growing grapes and manufacturing wine and brandies;
- 2. Manufacturing wine and brandies from grapes and other fruits grown elsewhere; and
- 3. Blending wines and brandies.

312130 WINERIES

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. Growing grapes and manufacturing wine and brandies;
- 2. Manufacturing wine and brandies from grapes and other fruits grown elsewhere; and
- 3. Blending wines and brandies.

31214 DISTILLERIES

This industry comprises establishments primarily engaged in one or more of the following:

- 1. Distilling potable liquors (except brandies);
- 2. Distilling and blending liquors; and
- 3. Blending and mixing liquors and other ingredients.

312140 DISTILLERIES

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. Distilling potable liquors (except brandies);
- 2. Distilling and blending liquors; and
- 3. Blending and mixing liquors and other ingredients.

3122 TOBACCO MANUFACTURING

This industry group comprises establishments primarily engaged in the stemming and redrying of tobacco, and in the manufacturing of tobacco products.

31221 TOBACCO STEMMING AND REDRYING

This industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

312210 TOBACCO STEMMING AND REDRYING

This U.S. industry comprises establishments primarily engaged in the stemming and redrying of tobacco.

31222 TOBACCO PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing cigarettes, cigars, smoking and chewing tobacco, and reconstituted tobacco.

312221 CIGARETTE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cigarettes.

312229 OTHER TOBACCO PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing tobacco products (except cigarettes).

313 TEXTILE MILLS

Industries in the Textile Mills subsector group establishments that transform a basic fiber (natural or synthetic) into a product, such as yarn or fabric, that is further manufactured into usable items, such as apparel, sheets towels, and textile bags for individual or industrial consumption. The further manufacturing may be performed in the same establishment and classified in this subsector, or it may be performed at a separate establishment and be classified elsewhere in manufacturing.

The main processes in this subsector include preparation and spinning of fiber, knitting or weaving of fabric, and the finishing of the textile. The NAICS structure follows and captures this process flow. Major industries in this flow, such as preparation of fibers, weaving of fabric, knitting of fabric, and fiber and fabric finishing, are uniquely identified. Texturizing, throwing, twisting, and winding of yarn contains aspects of both fiber preparation and fiber finishing and is classified with preparation of fibers rather than with finishing of fiber.

NAICS separates the manufacturing of primary textiles and the manufacturing of textile products (except apparel) when the textile product is produced from purchased primary textiles, such as fabric. The manufacturing of textile products (except apparel) from purchased fabric is classified in Subsector 314, Textile Product Mills, and apparel from purchased fabric is classified in Subsector 315, Apparel Manufacturing.

Excluded from this subsector are establishments that weave or knit fabric and make garments. These establishments are included in Subsector 315, Apparel Manufacturing.

3131 FIBER, YARN, AND THREAD MILLS

This NAICS Industry Group include establishments classified in NAICS Industry 31311, Fiber, Yarn, and Thread Mills.

31311 FIBER, YARN, AND THREAD MILLS

This industry comprises establishments primarily engaged in one or more of the following:

1. spinning yarn

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- 2. manufacturing thread of any fiber
- 3. texturizing, throwing, twisting, and winding purchased yarn or manmade fiber filaments
- 4. producing hemp yarn and further processing into rope or bags.

313111 YARN SPINNING MILLS

This U.S. industry comprises establishments primarily engaged in spinning yarn from any fiber and/or producing hemp yarn and further processing into rope or bags.

313112 YARN TEXTURIZING, THROWING, AND TWISTING MILLS

This U.S. industry comprises establishments primarily engaged in texturizing, throwing, twisting, spooling, or winding purchased yarns or manmade fiber filaments.

313113 THREAD MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing thread (e.g., sewing, hand-knitting, crochet) of all fibers.

3132 FABRIC MILLS

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Broadwoven fabric mills;
- 2. Narrow fabric mills and schiffli machine embroidery;
- 3. Nonwoven fabric mills; and
- 4. Knit fabric mills.

31321 BROADWOVEN FABRIC MILLS

This industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

313210 BROADWOVEN FABRIC MILLS

This U.S. industry comprises establishments primarily engaged in weaving broadwoven fabrics and felts (except tire fabrics and rugs). Establishments in this industry may weave only, weave and finish, or weave, finish, and further fabricate fabric products.

31322 NARROW FABRIC MILLS AND SCHIFFLI MACHINE EMBROIDERY

This industry comprises establishments primarily engaged in one or more of the following:

- 1. weaving or braiding narrow fabrics
- 2. manufacturing Schiffli machine embroideries
- 3. making fabric-covered elastic yarn and thread.

313221 NARROW FABRIC MILLS

This U.S. industry comprises establishments primarily engaged in:

- 1. weaving or braiding narrow fabrics in their final form or initially made in wider widths that are specially constructed for narrower widths and/or
- 2. making fabric-covered elastic yarn and thread.

Establishments in this industry may weave only; weave and finish; or weave, finish, and further fabricate fabric products.

313222 SCHIFFLI MACHINE EMBROIDERY

This U.S. industry comprises establishments primarily engaged in manufacturing Schiffli machine embroideries.

31323 NONWOVEN FABRIC MILLS

This industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

313230 NONWOVEN FABRIC MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing nonwoven fabrics and felts. Processes used include bonding and/or interlocking fibers by mechanical, chemical, thermal, or solvent means, or by combinations thereof.

31324 KNIT FABRIC MILLS

This industry comprises establishments primarily engaged in one of the following:

- 1. knitting weft (i.e., circular) and warp (i.e., flat) fabric
- 2. knitting and finishing weft and warp fabric
- 3. manufacturing lace
- 4. manufacturing, dyeing, and finishing lace and lace goods. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313241 WEFT KNIT FABRIC MILLS

This U.S. industry comprises establishments primarily engaged in knitting weft (i.e., circular) fabric or knitting and finishing weft fabric. Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

313249 OTHER KNIT FABRIC AND LACE MILLS

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. knitting warp (i.e., flat) fabric;
- 2. knitting and finishing warp fabric;
- 3. manufacturing lace; or
- 4. manufacturing, dyeing, or finishing lace and lace goods.

Establishments in this industry may knit only; knit and finish; or knit, finish, and further fabricate fabric products (except apparel).

3133 TEXTILE AND FABRIC FINISHING AND FABRIC COATING MILLS

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Textile and fabric finishing mills and
- 2. Fabric coating mills.

31331 TEXTILE AND FABRIC FINISHING MILLS

This industry comprises:

- 1. establishments primarily engaged in finishing of textiles, fabrics, and apparel
- 2. establishments of converters who buy fabric goods in the grey, have them finished on contract, and sell at wholesale. Finishing operations include:

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- a. bleaching
- b. dyeing
- c. printing (e.g., roller, screen, flock, plisse)
- d. stonewashing
- e. other mechanical finishing (preshrinking, shrinking, sponging, calendering, mercerizing, and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock).

313311 BROADWOVEN FABRIC FINISHING MILLS

This U.S. industry comprises:

- 1. Establishments primarily engaged in finishing broadwoven fabrics
- 2. Establishments of converters who buy broadwoven fabrics in the grey, have them finished on contract, and sell at wholesale.

313312 TEXTILE AND FABRIC FINISHING (EXCEPT BROADWOVEN FABRIC) MILLS

This U.S. industry comprises:

- 1. Establishments primarily engaged in dyeing, bleaching, printing, and other finishing of textiles, apparel, and fabrics (except broadwoven)
- 2. Establishments of converters who buy fabrics (except broadwoven) in the grey, have them finished on contract, and sell at wholesale. Finishing operations include bleaching, dyeing, printing (e.g., roller, screen, flock, plisse), stonewashing, and other mechanical finishing, such as preshrinking, shrinking, sponging, calendering, mercerizing and napping; as well as cleaning, scouring, and the preparation of natural fibers and raw stock.

31332 FABRIC COATING MILLS

This industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

313320 FABRIC COATING MILLS

This U.S. industry comprises establishments primarily engaged in coating, laminating, varnishing, waxing, and rubberizing textiles and apparel.

314 TEXTILE PRODUCT MILLS

Industries in the Textile Product Mills subsector group establishments that make textile products (except apparel). With a few exceptions, processes used in these industries are generally cut and sew (i.e., purchasing fabric and cutting and sewing to make nonapparel textile products, such as sheets and towels).

3141 TEXTILE FURNISHINGS MILLS

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Carpet and rug mills and
- 2. Curtain and linen mills.

31411 CARPET AND RUG MILLS

This industry comprises establishments primarily engaged in one or more of the following:

- 1. Manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or
- 2. Finishing carpets and rugs.

314110 CARPET AND RUG MILLS

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing woven, tufted, and other carpets and rugs, such as art squares, floor mattings, needlepunch carpeting, and door mats and mattings, from textile materials or from twisted paper, grasses, reeds, sisal, jute, or rags and/or
- 2. finishing carpets and rugs.

31412 CURTAIN AND LINEN MILLS

This industry comprises establishments primarily engaged in manufacturing household textile products, such as curtains, draperies, linens, bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

314121 CURTAIN AND DRAPERY MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing window curtains and draperies from purchased fabrics or sheet goods. The curtains and draperies may be made on a stock or custom basis for sale to individual retail customers.

314129 OTHER HOUSEHOLD TEXTILE PRODUCT MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing household textile products (except window curtains and draperies), such as bedspreads, sheets, tablecloths, towels, and shower curtains, from purchased materials.

3149 OTHER TEXTILE PRODUCT MILLS

This industry group comprises establishments primarily engaged in making textile products, (except carpets and rugs, curtains and draperies, and other household textile products) from purchased materials.

31491 TEXTILE BAG AND CANVAS MILLS

This industry comprises establishments primarily engaged in manufacturing textile bags, awnings, tents, and related products from purchased textile fabrics.

314911 TEXTILE BAG MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing bags from purchased textile fabrics or yarns.

314912 CANVAS AND RELATED PRODUCT MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing canvas and canvas-like products, such as awnings, sails, tarpaulins, and tents, from purchased fabrics.

31499 ALL OTHER TEXTILE PRODUCT MILLS

This industry comprises establishments primarily engaged in manufacturing nonapparel textile products (except carpet, rugs, curtains, linens, bags, and canvas products) from purchased materials.

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314991 ROPE, CORDAGE, AND TWINE MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from all materials (e.g., abaca, sisal, henequen, hemp, cotton, paper, jute, flax, manmade fibers including glass).

314992 TIRE CORD AND TIRE FABRIC MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing cord and fabric of polyester, rayon, cotton, glass, steel, or other materials for use in reinforcing rubber tires, industrial belting, and similar uses.

314999 ALL OTHER MISCELLANEOUS TEXTILE PRODUCT MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing textile products (except carpets and rugs; curtains and linens; textile bags and canvas products; rope, cordage, and twine; and tire cords and tire fabrics) from purchased materials.

315 APPAREL MANUFACTURING

Industries in the Apparel Manufacturing subsector group establishments with two distinct manufacturing processes:

- 1. Cut and sew (i.e., purchasing fabric and cutting and sewing to make a garment), and
- 2. The manufacture of garments in establishments that first knit fabric and then cut and sew the fabric into a garment.

The Apparel Manufacturing subsector includes a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients are all included. Knitting, when done alone, is classified in the Textile Mills subsector, but when knitting is combined with the production of complete garments, the activity is classified in Apparel Manufacturing.

3151 APPAREL KNITTING MILLS

This industry group comprises establishments primarily engaged in knitting apparel or knitting fabric and then manufacturing apparel. This industry group includes jobbers performing entrepreneurial functions involved in knitting apparel and accessories. Knitting fabric, without manufacturing apparel, is classified in Subsector 313, Textile Mills.

31511 HOSIERY AND SOCK MILLS

This industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery and socks.

315111 SHEER HOSIERY MILLS

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing women's, misses', and girls' full-length and knee-length sheer hosiery (except socks).

315119 OTHER HOSIERY AND SOCK MILLS

This U.S. industry comprises establishments primarily engaged in knitting or knitting and finishing hosiery (except women's, misses', and girls' sheer hosiery).

31519 OTHER APPAREL KNITTING MILLS

This industry comprises establishments primarily engaged in one of the following:

1. knitting underwear, outerwear, and/or nightwear;

- 2. knitting fabric and manufacturing underwear, outerwear, and/or nightwear; or
- 3. knitting, manufacturing, and finishing knit underwear, outerwear, and/or nightwear.

315191 OUTERWEAR KNITTING MILLS

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. knitting outerwear;
- 2. knitting fabric and manufacturing outerwear; and
- 3. knitting, manufacturing, and finishing knit outerwear.

Examples of products made in knit outerwear mills are shirts, shorts, sweat suits, sweaters, gloves, and pants.

315192 UNDERWEAR AND NIGHTWEAR KNITTING MILLS

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. knitting underwear and nightwear;
- 2. knitting fabric and manufacturing underwear and nightwear; or
- 3. knitting, manufacturing, and finishing knit underwear and nightwear.

Examples of products produced in underwear and nightwear knitting mills are briefs, underwear T-shirts, pajamas, nightshirts, foundation garments, and panties.

3152 CUT AND SEW APPAREL MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing cut and sew apparel from woven fabric or purchased knit fabric. Included in this industry group is a diverse range of establishments manufacturing full lines of ready-to-wear apparel and custom apparel: apparel contractors, performing cutting or sewing operations on materials owned by others; jobbers performing entrepreneurial functions involved in apparel manufacture; and tailors, manufacturing custom garments for individual clients. Establishments weaving or knitting fabric, without manufacturing apparel, are classified in Subsector 313, Textile Mills.

31521 CUT AND SEW APPAREL CONTRACTORS

This industry comprises establishments commonly referred to as contractors primarily engaged in one of the following:

- 1. cutting materials owned by others for apparel and accessories and/or
- 2. sewing materials owned by others for apparel and accessories.

315211 MEN'S AND BOYS' CUT AND SEW APPAREL CONTRACTORS

This U.S. industry comprises establishments (commonly referred to as contractors) primarily engaged in:

- 1. cutting materials owned by others for men's and boys' apparel and/or
- 2. sewing materials owned by others for men's and boys' apparel.

315212 WOMEN'S, GIRLS', AND INFANTS' CUT AND SEW APPAREL CONTRACTORS

This U.S. industry comprises establishments commonly referred to as contractors primarily engaged in one of the following:

- 1. cutting materials owned by others for women's, girls', and infants' apparel and accessories and/or
- 2. sewing materials owned by others for women's, girls', and infants' apparel and accessories.

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31522 MEN'S AND BOYS' CUT AND SEW APPAREL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew apparel from purchased fabric. Men's and boys' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315221 MEN'S AND BOYS' CUT AND SEW UNDERWEAR AND NIGHTWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' underwear and nightwear from purchased fabric. Men's and boys' underwear and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are briefs, bathrobes, underwear T-shirts and shorts, nightshirts, and pajamas.

315222 MEN'S AND BOYS' CUT AND SEW SUIT, COAT, AND OVERCOAT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' suits, overcoats, sport coats, tuxedos, dress uniforms, and other tailored apparel (except fur and leather) from purchased fabric. Men's and boys' suit, coat, and overcoat jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315223 MEN'S AND BOYS' CUT AND SEW SHIRT (EXCEPT WORK SHIRT) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' outerwear shirts from purchased fabric. Men's and boys' shirt (except work shirt) jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex outerwear shirts, such as T-shirts and sweatshirts that are sized without specific reference to gender (i.e., adult S, M, L, XL) are included in this industry.

315224 MEN'S AND BOYS' CUT AND SEW TROUSER, SLACK, AND JEAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' jeans, dungarees, and other separate trousers and slacks (except work pants) from purchased fabric. Men's and boys' trouser, slack, and jean jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315225 MEN'S AND BOYS' CUT AND SEW WORK CLOTHING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' work shirts, work pants (excluding jeans and dungarees), other work clothing, and washable service apparel from purchased fabric. Men's and boys' work clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are washable service apparel, laboratory coats, work shirts, work pants (except jeans and dungarees), and hospital apparel.

315228 MEN'S AND BOYS' CUT AND SEW OTHER OUTERWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew outerwear from purchased fabric (except underwear, nightwear, shirts, suits, overcoats and tailored coats, separate trousers and slacks, and work clothing). Men's and boys' other outerwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Unisex sweatpants and similar garments that are sized without specific reference to gender (i.e., adult S, M, L, XL) are also included in this industry. Examples of products made by these establishments are athletic clothing (except athletic uniforms), bathing suits, down coats, outerwear shorts, windbreakers and jackets, and jogging suits.

31523 WOMEN'S AND GIRLS' CUT AND SEW APPAREL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing women's and girls' apparel from purchased fabric. Women's and girls' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315231 WOMEN'S AND GIRLS' CUT AND SEW LINGERIE, LOUNGEWEAR, AND NIGHTWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' bras, girdles, and other underwear; lingerie; loungewear; and nightwear from purchased fabric. Women's and girls' lingerie, loungewear, and nightwear jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathrobes, foundation garments, nightgowns, pajamas, panties, and slips.

315232 WOMEN'S AND GIRLS' CUT AND SEW BLOUSE AND SHIRT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' blouses and shirts from purchased fabric. Women's and girls' blouse and shirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315233 WOMEN'S AND GIRLS' CUT AND SEW DRESS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' dresses from purchased fabric. Women's and girls' dress jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315234 WOMEN'S AND GIRLS' CUT AND SEW SUIT, COAT, TAILORED JACKET, AND SKIRT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' suits, pantsuits, skirts, tailored jackets, vests, raincoats, and other tailored coats, (except fur and leather coats) from purchased fabric. Women's and girls' suit, coat, tailored jacket, and skirt jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

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315239 WOMEN'S AND GIRLS' CUT AND SEW OTHER OUTERWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's and girls' cut and sew apparel from purchased fabric (except underwear, lingerie, nightwear, blouses, shirts, dresses, suits, tailored coats, tailored jackets, and skirts). Women's and girls' other outerwear clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are bathing suits, down coats, sweaters, jogging suits, outerwear pants and shorts, and windbreakers.

31529 OTHER CUT AND SEW APPAREL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except men's, boys', women's, and girls' apparel). This industry includes establishments manufacturing apparel, such as fur apparel, leather apparel, infants' apparel, costumes, and clerical vestments.

315291 INFANTS' CUT AND SEW APPAREL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing infants' dresses, blouses, shirts, and all other infants' wear from purchased fabric. Infants' clothing jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. For the purposes of classification, the term "infants' apparel" includes apparel for young children of an age not exceeding 24 months.

315292 FUR AND LEATHER APPAREL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew fur and leather apparel, and sheep-lined clothing. Fur and leather apparel jobbers, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included.

315299 ALL OTHER CUT AND SEW APPAREL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew apparel from purchased fabric (except cut and sew apparel contractors; men's and boys' cut and sew underwear, nightwear, suits, coats, shirts, trousers, work clothing, and other outerwear; women's and girls' lingerie, blouses, shirts, dresses, suits, coats, and other outerwear; infants' apparel; and fur and leather apparel). Clothing jobbers for these products, who perform entrepreneurial functions involved in apparel manufacture, including buying raw materials, designing and preparing samples, arranging for apparel to be made from their materials, and marketing finished apparel, are included. Examples of products made by these establishments are team athletic uniforms, band uniforms, academic caps and gowns, clerical vestments, and costumes.

3159 APPAREL ACCESSORIES AND OTHER APPAREL MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing apparel accessories and other apparel (except apparel knitting mills, apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, infants' cut and sew apparel, fur and leather apparel, and all other cut and sew apparel). This industry group includes jobbers performing entrepreneurial functions involved in manufacturing apparel accessories.

31599 APPAREL ACCESSORIES AND OTHER APPAREL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing apparel and accessories (except apparel knitting mills, cut and sew apparel contractors, men's and boys' cut and sew apparel, women's and girls' cut and sew apparel, and other cut and sew apparel). Jobbers, who

perform entrepreneurial functions involved in apparel accessories manufacture, including buying raw materials, designing and preparing samples, arranging for apparel accessories to be made from their materials, and marketing finished apparel accessories, are included. Examples of products made by these establishments are belts, caps, gloves (except medical, sporting, safety), hats, and neckties.

315991 HAT, CAP, AND MILLINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew hats, caps, millinery, and hat bodies from purchased fabric. Jobbers, who perform entrepreneurial functions involved in hat, cap, and millinery manufacture, including buying raw materials, designing and preparing samples, arranging for hats, caps, and millinery to be made from their materials, and marketing finished hats, caps, and millinery, are included.

315992 GLOVE AND MITTEN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing cut and sew gloves (except rubber, metal, and athletic gloves) and mittens from purchased fabric, fur, leather, or from combinations of fabric, fur, or leather. Jobbers, who perform entrepreneurial functions involved in glove and mitten manufacture, including buying raw materials, designing and preparing samples, arranging for gloves and mittens to be made from their materials, and marketing finished gloves and mittens, are included.

315993 MEN'S AND BOYS' NECKWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's and boys' cut and sew neckties, scarves, and mufflers from purchased fabric, leather, or from combinations of leather and fabric. Men's and boys' neckwear jobbers, who perform entrepreneurial functions involved in neckwear manufacture, including buying raw materials, designing and preparing samples, arranging for neckwear to be made from their materials, and marketing finished neckwear, are included.

315999 OTHER APPAREL ACCESSORIES AND OTHER APPAREL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing apparel and apparel accessories (except apparel knitting mills; cut and sew apparel contractors; cut and sew apparel; hats and caps; mittens and gloves; and men's and boys' neckwear). Jobbers for these products, who perform entrepreneurial functions involved in other apparel and accessory manufacture, including buying raw materials, designing and preparing samples, arranging for other apparel and accessories to be made from their materials, and marketing finished other apparel and accessories, are included. Examples of products made by these establishments are apparel trimmings and findings, belts, women's scarves, and suspenders.

316 LEATHER AND ALLIED PRODUCT MANUFACTURING

Establishments in the Leather and Allied Product Manufacturing subsector transform hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials, including products (except apparel) made from "leather substitutes," such as rubber, plastics, or textiles. Rubber footwear, textile luggage, and plastics purses or wallets are examples of "leather substitute" products included in this group. The products made from leather substitutes are included in this subsector because they are made in similar ways leather products are made (e.g., luggage). They are made in the same establishments, so it is not practical to separate them.

The inclusion of leather making in this subsector is partly because leather tanning is a relatively small industry that has few close neighbors as a production process, partly because leather is an input to some of the other products classified in this subsector and partly for historical reasons.

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3161 LEATHER AND HIDE TANNING AND FINISHING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Tanning, currying, and finishing hides and skins;
- 2. Having others process hides and skins on a contract basis; and
- 3. Dyeing or dressing furs.

31611 LEATHER AND HIDE TANNING AND FINISHING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. tanning, currying, and finishing hides and skins;
- 2. having others process hides and skins on a contract basis; and
- 3. dyeing or dressing furs.

316110 LEATHER AND HIDE TANNING AND FINISHING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. tanning, currying, and finishing hides and skins;
- 2. having others process hides and skins on a contract basis; and
- 3. dyeing or dressing furs.

3162 FOOTWEAR MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

31621 FOOTWEAR MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing footwear (except orthopedic extension footwear).

316211 RUBBER AND PLASTICS FOOTWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing rubber and plastics footwear with vulcanized rubber or plastics soles, molded or cemented to rubber, plastics, or fabric uppers, and rubber and plastics protective footwear.

316212 HOUSE SLIPPER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing house slippers and slipper socks, regardless of material.

316213 MEN'S FOOTWEAR (EXCEPT ATHLETIC) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing men's footwear designed primarily for dress, street, and work. This industry includes men's shoes with rubber or plastics soles and leather or vinyl uppers.

316214 WOMEN'S FOOTWEAR (EXCEPT ATHLETIC) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's footwear designed for dress, street, and work. This industry includes women's shoes with rubber or plastics soles and leather or vinyl uppers.

316219 OTHER FOOTWEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing other footwear (except rubber and plastics footwear; house slippers; men's footwear (except athletic); and women's footwear (except athletic)).

3169 OTHER LEATHER AND ALLIED PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

31699 OTHER LEATHER AND ALLIED PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing leather products (except footwear and apparel) from purchased leather or leather substitutes (e.g., fabric, plastics).

316991 LUGGAGE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing luggage of any material.

316992 WOMEN'S HANDBAG AND PURSE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing women's hand-bags and purses of any material (except precious metal).

316993 PERSONAL LEATHER GOOD (EXCEPT WOMEN'S HANDBAG AND PURSE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing personal leather goods (i.e., small articles of any material (except metal) normally carried on or about the person or in a handbag). Examples of personal leather goods made by these establishments are billfolds, coin purses, key cases, toilet kits, and watchbands (except metal).

316999 ALL OTHER LEATHER GOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing leather goods (except footwear, luggage, handbags, purses, and personal leather goods).

321 WOOD PRODUCT MANUFACTURING

Industries in the Wood Product Manufacturing subsector manufacture wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, manufactured homes (i.e., mobile home), and prefabricated wood buildings. The production processes of the Wood Product Manufacturing subsector include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that then may be further cut, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers. The Wood Product Manufacturing subsector includes establishments that make wood products from logs and bolts that are sawed and shaped, and establishments that purchase sawed lumber and make wood products. With the exception of sawmills and wood preservation establishments, the establishments are grouped into industries mainly based on the specific products manufactured.

3211 SAWMILLS AND WOOD PRESERVATION

This industry group comprises establishments whose primary production process begins with logs or bolts that are transformed into boards, dimension lumber, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips. Establishments that cut and treat round wood and/or treat wood products made in other establishments to prevent rotting by impregnation with creosote or other chemical compounds are also included in this industry group.

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32111 SAWMILLS AND WOOD PRESERVATION

This industry comprises establishments primarily engaged in one or more of the following:

- 1. sawing dimension lumber, boards, beams, timber, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts;
- 2. sawing round wood poles, pilings, and posts and treating them with preservatives; and
- 3. treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives to prevent decay and to protect against fire and insects.

Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321113 SAWMILLS

This U.S. industry comprises establishments primarily engaged in sawing dimension lumber, boards, beams, timbers, poles, ties, shingles, shakes, siding, and wood chips from logs or bolts. Sawmills may plane the rough lumber that they make with a planing machine to achieve smoothness and uniformity of size.

321114 WOOD PRESERVATION

This U.S. industry comprises establishments primarily engaged in:

- treating wood sawed, planed, or shaped in other establishments with creosote or other preservatives, such as chromated copper arsenate, to prevent decay and to protect against fire and insects and/or
- 2. sawing round wood poles, pilings, and posts and treating them with preservatives.

3212 VENEER, PLYWOOD, AND ENGINEERED WOOD PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Manufacturing veneer and/or plywood;
- 2. Manufacturing engineered wood members; and
- 3. Manufacturing reconstituted wood products.

This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

32121 VENEER, PLYWOOD, AND ENGINEERED WOOD PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing veneer and/or plywood;
- 2. manufacturing engineered wood members; and
- 3. manufacturing reconstituted wood products.

This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with nonwood materials, such as plastics or metal.

321211 HARDWOOD VENEER AND PLYWOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing hardwood veneer and/or hardwood plywood.

321212 SOFTWOOD VENEER AND PLYWOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing softwood veneer and/or softwood plywood.

321213 ENGINEERED WOOD MEMBER (EXCEPT TRUSS) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated or laminated wood arches and/or other fabricated or laminated wood structural members.

321214 TRUSS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing laminated or fabricated wood roof and floor trusses.

321219 RECONSTITUTED WOOD PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing reconstituted wood sheets and boards.

3219 OTHER WOOD PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, or engineered wood products).

32191 MILLWORK

This industry comprises establishments primarily engaged in manufacturing hardwood and softwood cut stock and dimension stock (i.e., shapes); wood windows and wood doors; and other millwork including wood flooring. Dimension stock or cut stock is defined as lumber and worked wood products cut or shaped to specialized sizes. These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321911 WOOD WINDOW AND DOOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing window and door units, sash, window and door frames, and doors from wood or wood clad with metal or plastics.

321912 CUT STOCK, RESAWING LUMBER, AND PLANING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing dimension lumber from purchased lumber;
- 2. manufacturing dimension stock (i.e., shapes) or cut stock;
- 3. resawing the output of sawmills; and
- 4. planing purchased lumber.

These establishments generally use woodworking machinery, such as jointers, planers, lathes, and routers to shape wood.

321918 OTHER MILLWORK (INCLUDING FLOORING)

This U.S. industry comprises establishments primarily engaged in manufacturing millwork (except wood windows, wood doors, and cut stock).

32192 WOOD CONTAINER AND PALLET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shook, wood boxes, other wood containers, and wood parts for pallets and containers.

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321920 WOOD CONTAINER AND PALLET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood pallets, wood box shook, wood boxes, other wood containers, and wood parts for pallets and containers.

32199 ALL OTHER WOOD PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and wood preservation facilities; and establishments manufacturing veneer, plywood, engineered wood products, millwork, wood containers, or pallets).

321991 MANUFACTURED HOME (MOBILE HOME) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in making manufactured homes (i.e., mobile homes) and nonresidential mobile buildings. Manufactured homes are designed to accept permanent water, sewer, and utility connections and although equipped with wheels, they are not intended for regular highway movement.

321992 PREFABRICATED WOOD BUILDING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated wood buildings and wood sections and panels for prefabricated wood buildings.

321999 ALL OTHER MISCELLANEOUS WOOD PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood products (except establishments operating sawmills and preservation facilities; establishments manufacturing veneer, engineered wood products, millwork, wood containers, pallets, and wood container parts; and establishments making manufactured homes (i.e., mobile homes) and prefabricated buildings and components).

322 PAPER MANUFACTURING

Industries in the Paper Manufacturing subsector make pulp, paper, or converted paper products. The manufacturing of these products is grouped together because they constitute a series of vertically connected processes. More than one is often carried out in a single establishment. There are essentially three activities. The manufacturing of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacturing of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques and includes coating and laminating activities.

The Paper Manufacturing subsector is subdivided into two industry groups, the first for the manufacturing of pulp and paper and the second for the manufacturing of converted paper products. Paper making is treated as the core activity of the subsector. Therefore, any establishment that makes paper (including paperboard), either alone or in combination with pulp manufacturing or paper converting, is classified as a paper or paperboard mill. Establishments that make pulp without making paper are classified as pulp mills. Pulp mills, paper mills and paperboard mills comprise the first industry group.

Establishments that make products from purchased paper and other materials make up the second industry group, Converted Paper Product Manufacturing. This general activity is then subdivided based, for the most part, on process distinctions. Paperboard container manufacturing uses corrugating, cutting, and shaping machinery to form paperboard into containers. Paper bag and coated and treated paper manufacturing establishments cut and coat paper and foil. Stationery product manufacturing establishments make a variety of paper products used for writing, filing, and similar applications. Other converted paper product manufacturing includes, in particular, the conversion of sanitary paper stock into such things as tissue paper and disposable diapers.

An important process used in the Paper Bag and Coated and Treated Paper Manufacturing industry is lamination, often combined with coating. Lamination and coating makes a composite material with improved properties of strength, impermeability, and so on. The laminated materials may be paper, metal foil, or plastics film. While paper is often one of the components, it is not always. Lamination of plastics film to plastics film is classified in the NAICS Subsector 326, Plastics and Rubber Products Manufacturing, because establishments that do this often first make the film. The same situation holds with respect to bags. The manufacturing of bags from plastics only, whether or not laminated, is classified in Subsector 326, Plastics and Rubber Products Manufacturing, but all other bag manufacturing is classified in this subsector.

Excluded from this subsector are photosensitive papers. These papers are chemically treated and are classified in Industry 32599, All Other Chemical Product and Preparation Manufacturing.

3221 PULP, PAPER, AND PAPERBOARD MILLS

This industry group comprises establishments primarily engaged in manufacturing pulp, paper, or paperboard.

32211 PULP MILLS

This industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

322110 PULP MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing pulp without manufacturing paper or paperboard. The pulp is made by separating the cellulose fibers from the other impurities in wood or other materials, such as used or recycled rags, linters, scrap paper, and straw.

32212 PAPER MILLS

This industry comprises establishments primarily engaged in manufacturing paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may convert the paper they make. The activity of making paper classifies an establishment into this industry regardless of the output.

322121 PAPER (EXCEPT NEWSPRINT) MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing paper (except newsprint and uncoated groundwood paper) from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

322122 NEWSPRINT MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing newsprint and uncoated groundwood paper from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paper they make.

32213 PAPERBOARD MILLS

This industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

322130 PAPERBOARD MILLS

This U.S. industry comprises establishments primarily engaged in manufacturing paperboard from pulp. These establishments may manufacture or purchase pulp. In addition, the establishments may also convert the paperboard they make.

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3222 CONVERTED PAPER PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in converting paper or paper-board without manufacturing paper or paperboard.

32221 PAPERBOARD CONTAINER MANUFACTURING

This industry comprises establishments primarily engaged in converting paperboard into containers without manufacturing paperboard. These establishments use corrugating, cutting, and shaping machinery to form paperboard into containers. Products made by these establishments include boxes; corrugated sheets, pads, and pallets; paper dishes; and fiber drums and reels.

322211 CORRUGATED AND SOLID FIBER BOX MANUFACTURING

This U.S. industry comprises establishments primarily engaged in laminating purchased paper or paperboard into corrugated or solid fiber boxes and related products, such as pads, partitions, pallets, and corrugated paper without manufacturing paperboard. These boxes are generally used for shipping.

322212 FOLDING PAPERBOARD BOX MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paperboard (except corrugated) into folding paperboard boxes without manufacturing paper and paperboard.

322213 SETUP PAPERBOARD BOX MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paperboard into setup paperboard boxes (i.e., rigid-sided boxes not shipped flat) without manufacturing paperboard.

322214 FIBER CAN, TUBE, DRUM, AND SIMILAR PRODUCTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paperboard into fiber cans, tubes, drums, and similar products without manufacturing paperboard.

322215 NONFOLDING SANITARY FOOD CONTAINER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting sanitary foodboard into food containers (except folding).

32222 PAPER BAG AND COATED AND TREATED PAPER MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. cutting and coating paper and paperboard;
- 2. cutting and laminating paper and paperboard and other flexible materials (except plastics film to plastics film);
- 3. manufacturing bags or multiwall bags or sacks of paper, metal foil, coated paper, or laminates or coated combinations of paper and foil with plastics film;
- 4. manufacturing laminated aluminum and other converted metal foils from purchased foils; and
- 5. surface coating paper or paperboard.

322221 COATED AND LAMINATED PACKAGING PAPER AND PLASTICS FILM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. cutting and coating paper and

2. cutting and laminating paper with other flexible materials (except plastics to plastics or foil to paper laminates).

The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

322222 COATED AND LAMINATED PAPER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in performing one or more of the following activities associated with making products designed for purposes other than packaging:

- 1. cutting and coating paper;
- cutting and laminating paper and other flexible materials (except plastics film to plastics film);
- 3. laminating aluminum and other metal foils for nonpackaging uses from purchased foils.

The products made in this industry are made from purchased sheet materials and may be printed in the same establishment.

322223 PLASTICS, FOIL, AND COATED PAPER BAG MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing bags of coated paper, of metal foil, or of laminated or coated combinations of plastics, foil, and paper, whether or not printed.

322224 UNCOATED PAPER AND MULTIWALL BAG MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing uncoated paper bags or multiwall bags and sacks.

322225 LAMINATED ALUMINUM FOIL MANUFACTURING FOR FLEXIBLE PACKAGING USES

This U.S. industry comprises establishments primarily engaged in laminating aluminum and other metal foil into products with flexible packaging uses or gift wrap and other packaging wrap applications.

322226 SURFACE-COATED PAPERBOARD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in laminating, lining, or surface coating purchased paperboard to make other paperboard products.

32223 STATIONERY PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in converting paper or paperboard into products used for writing, filing, art work, and similar applications.

322231 DIE-CUT PAPER AND PAPERBOARD OFFICE SUPPLIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paper rollstock or paperboard into die-cut paper or paperboard office supplies. For the purpose of this industry, office supplies are defined as office products, such as filing folders, index cards, rolls for adding machines, file separators and dividers, tabulating cards, and other paper and paperboard office supplies.

322232 ENVELOPE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing envelopes for mailing or stationery of any material including combinations.

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322233 STATIONERY, TABLET, AND RELATED PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paper and paper-board into products used for writing and similar applications (e.g., looseleaf fillers, notebooks, pads, stationery, and tablets).

32229 OTHER CONVERTED PAPER PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in one of the following:

- 1. converting paper and paperboard into products (except containers, bags, coated and treated paper and paperboard, and stationery products), or
- 2. converting pulp into pulp products, such as disposable diapers, or molded pulp egg cartons, food trays, and dishes.

Processes used include laminating or lining purchased paper or paperboard.

322291 SANITARY PAPER PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting purchased sanitary paper stock or wadding into sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, sanitary napkins, and tampons.

322299 ALL OTHER CONVERTED PAPER PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting paper or paperboard into products (except containers, bags, coated and treated paper, stationery products, and sanitary paper products) or converting pulp into pulp products, such as egg cartons, food trays, and other food containers from molded pulp.

323 PRINTING AND RELATED SUPPORT ACTIVITIES

Industries in the Printing and Related Support Activities subsector print products, such as newspapers, books, labels, business cards, stationery, business forms, and other materials, and perform support activities, such as data imaging, platemaking services, and bookbinding. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods used to transfer an image from a plate, screen, film, or computer file to some medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods is to transfer the image from a plate or screen to the medium (lithographic, gravure, screen, and flexographic printing). A rapidly growing new technology uses a computer file to directly "drive" the printing mechanism to create the image and new electrostatic and other types of equipment (digital or nonimpact printing).

In contrast to many other classification systems that locate publishing of printed materials in manufacturing, NAICS classifies the publishing of printed products in Subsector 511, Publishing Industries (except Internet). Though printing and publishing are often carried out by the same enterprise (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same establishment. When publishing and printing are done in the same establishment, the establishment is classified in Sector 51, Information, in the appropriate NAICS industry even if the receipts for printing exceed those for publishing.

This subsector includes printing on clothing because the production process for that activity is printing, not clothing manufacturing. For instance, the printing of T-shirts is included in this subsector. In contrast, printing on fabric (or grey goods) is not included. This activity is part of the process of finishing the fabric and is included in the NAICS Textile Mills subsector in Industry 31331, Textile and Fabric Finishing Mills.

3231 PRINTING AND RELATED SUPPORT ACTIVITIES

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods) and/or
- 2. Performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

32311 PRINTING

This industry comprises establishments primarily engaged in printing on apparel and textile products, paper, metal, glass, plastics, and other materials, except fabric (grey goods). The printing processes employed include, but are not limited to, lithographic, gravure, screen, flexographic, digital, and letterpress. Establishments in this industry do not manufacture the stock that they print but may perform postprinting activities, such as folding, cutting, or laminating the materials they print, and mailing.

323110 COMMERCIAL LITHOGRAPHIC PRINTING

This U.S. industry comprises establishments primarily engaged in lithographic (i.e., offset) printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in lithographic printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

323111 COMMERCIAL GRAVURE PRINTING

This U.S. industry comprises establishments primarily engaged in gravure printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in gravure printing on purchased stock materials, such as stationery, letterhead, invitations, labels, and similar items, on a job order basis.

323112 COMMERCIAL FLEXOGRAPHIC PRINTING

This U.S. industry comprises establishments primarily engaged in flexographic printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in flexographic printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

323113 COMMERCIAL SCREEN PRINTING

This U.S. industry comprises establishments primarily engaged in screen printing without publishing (except books, grey goods, and manifold business forms). This industry includes establishments engaged in screen printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis. Establishments primarily engaged in printing on apparel and textile products, such as T-shirts, caps, jackets, towels, and napkins, are included in this industry.

323114 QUICK PRINTING

This U.S. industry comprises establishments primarily engaged in traditional printing activities, such as short-run offset printing or prepress services, in combination with providing document photocopying service. Prepress services include receiving documents in electronic format and directly duplicating from the electronic file and formatting, colorizing, and otherwise modifying the original document to improve presentation. These establishments, known as quick printers, generally provide short-run printing and copying with fast turnaround times.

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323115 DIGITAL PRINTING

This U.S. industry comprises establishments primarily engaged in printing graphical materials using digital printing equipment. Establishments known as digital printers typically provide sophisticated prepress services including using scanners to input images and computers to manipulate and format the graphic images prior to printing.

323116 MANIFOLD BUSINESS FORMS PRINTING

This U.S. industry comprises establishments primarily engaged in printing special forms, including checkbooks, for use in the operation of a business. The forms may be in single and multiple sets, including carbonized, interleaved with carbon, or otherwise processed for multiple reproduction.

323117 BOOKS PRINTING

This U.S. industry comprises establishments primarily engaged in printing or printing and binding books and pamphlets without publishing.

323118 BLANKBOOK, LOOSELEAF BINDERS, AND DEVICES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and binders. Establishments in this industry may print or print and bind.

323119 OTHER COMMERCIAL PRINTING

This U.S. industry comprises establishments primarily engaged in commercial printing (except lithographic, gravure, screen, or flexographic printing) without publishing (except books, grey goods, and manifold business forms). Printing processes included in this industry are letterpress printing and engraving printing. This industry includes establishments engaged in commercial printing on purchased stock materials, such as stationery, invitations, labels, and similar items, on a job order basis.

32312 SUPPORT ACTIVITIES FOR PRINTING

This industry comprises establishments primarily engaged in performing prepress (e.g., platemaking, typesetting) and postpress services (e.g., book binding) in support of printing activities.

323121 TRADEBINDING AND RELATED WORK

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. tradebinding;
- 2. sample mounting; and
- 3. postpress services (e.g., book or paper bronzing, die-cutting, edging, embossing, folding, gilding, gluing, indexing).

323122 PREPRESS SERVICES

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. prepress services, such as imagesetting or typesetting, for printers and
- 2. preparing film or plates for printing purposes.

324 PETROLEUM AND COAL PRODUCTS MANUFACTURING

The Petroleum and Coal Products Manufacturing subsector is based on the transformation of crude petroleum and coal into usable products. The dominant process is petroleum refining that involves the separation of crude petroleum into component products through such techniques as cracking and distillation.

In addition, this subsector includes establishments that primarily further process refined petroleum and coal products and produce products, such as asphalt coatings and petroleum lubricating oils. However, establishments that manufacture petrochemicals from refined petroleum are classified in Industry 32511, Petrochemical Manufacturing.

3241 PETROLEUM AND COAL PRODUCTS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Petroleum refineries manufacturing;
- 2. Asphalt paving, roofing, and saturated materials manufacturing; and/or
- 3. Other petroleum and coal products manufacturing.

32411 PETROLEUM REFINERIES

This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities:

- 1. fractionation;
- 2. straight distillation of crude oil; and
- 3. cracking.

324110 PETROLEUM REFINERIES

This U.S. industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities:

- 1. fractionation;
- 2. straight distillation of crude oil; and
- 3. cracking.

32412 ASPHALT PAVING, ROOFING, AND SATURATED MATERIALS MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing asphalt and tar paving mixtures and blocks and roofing cements and coatings from purchased asphaltic materials and/or
- 2. saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials.

324121 ASPHALT PAVING MIXTURE AND BLOCK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing asphalt and tar paving mixtures and blocks from purchased asphaltic materials.

324122 ASPHALT SHINGLE AND COATING MATERIALS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. saturating purchased mats and felts with asphalt or tar from purchased asphaltic materials
- 2. manufacturing asphalt and tar and roofing cements and coatings from purchased asphaltic materials.

32419 OTHER PETROLEUM AND COAL PRODUCTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing and saturated materials) from refined petroleum or coal products made in coke ovens not integrated with a steel mill.

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324191 PETROLEUM LUBRICATING OIL AND GREASE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils.

324199 ALL OTHER PETROLEUM AND COAL PRODUCTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing petroleum products (except asphalt paving, roofing, and saturated materials and lubricating oils and greases) from refined petroleum and coal products made in coke ovens not integrated with a steel mill.

325 CHEMICAL MANUFACTURING

The Chemical Manufacturing subsector is based on the transformation of organic and inorganic raw materials by a chemical process and the formulation of products. This subsector distinguishes the production of basic chemicals that comprise the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry groups.

This subsector does not include all industries transforming raw materials by a chemical process. It is common for some chemical processing to occur during mining operations. These beneficiating operations, such as copper concentrating, are classified in Sector 21, Mining. Furthermore, the refining of crude petroleum is included in Subsector 324, Petroleum and Coal Products Manufacturing. In addition, the manufacturing of aluminum oxide is included in Subsector 331, Primary Metal Manufacturing; and beverage distilleries are classified in Subsector 312, Beverage and Tobacco Product Manufacturing. As in the case of these two activities, the grouping of industries into subsectors may take into account the association of the activities performed with other activities in the subsector.

3251 BASIC CHEMICAL MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

32511 PETROCHEMICAL MANUFACTURING

This industry comprises establishments primarily engaged in one of the following:

- 1. manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or
- 2. manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

325110 PETROCHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. manufacturing acyclic (i.e., aliphatic) hydrocarbons such as ethylene, propylene, and butylene made from refined petroleum or liquid hydrocarbon and/or
- 2. manufacturing cyclic aromatic hydrocarbons such as benzene, toluene, styrene, xylene, ethyl benzene, and cumene made from refined petroleum or liquid hydrocarbons.

32512 INDUSTRIAL GAS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

325120 INDUSTRIAL GAS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing industrial organic and inorganic gases in compressed, liquid, and solid forms.

32513 SYNTHETIC DYE AND PIGMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing synthetic organic and inorganic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

325131 INORGANIC DYE AND PIGMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing inorganic dyes and pigments.

325132 SYNTHETIC ORGANIC DYE AND PIGMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing synthetic organic dyes and pigments, such as lakes and toners (except electrostatic and photographic).

32518 OTHER BASIC INORGANIC CHEMICAL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases and synthetic dyes and pigments).

325181 ALKALIES AND CHLORINE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing chlorine, sodium hydroxide (i.e., caustic soda), and other alkalies often using an electrolysis process.

325182 CARBON BLACK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing carbon black, bone black, and lamp black.

325188 ALL OTHER BASIC INORGANIC CHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing basic inorganic chemicals (except industrial gases, inorganic dyes and pigments, alkalies and chlorine, and carbon black).

32519 OTHER BASIC ORGANIC CHEMICAL MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing basic organic chemicals (except petrochemicals, industrial gases, and synthetic dyes and pigments).

325191 GUM AND WOOD CHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in (1) distilling wood or gum into products, such as tall oil and wood distillates, and (2) manufacturing wood or gum chemicals, such as naval stores, natural tanning materials, charcoal briquettes, and charcoal (except activated).

325192 CYCLIC CRUDE AND INTERMEDIATE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in (1) distilling coal tars and/or (2) manufacturing cyclic crudes or, cyclic intermediates (i.e., hydrocarbons, except aromatic petrochemicals) from refined petroleum or natural gas.

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325193 ETHYL ALCOHOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonpotable ethyl alcohol.

325199 ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing basic organic chemical products (except aromatic petrochemicals, industrial gases, synthetic organic dyes and pigments, gum and wood chemicals, cyclic crudes and intermediates, and ethyl alcohol).

3252 RESIN, SYNTHETIC RUBBER, AND ARTIFICIAL AND SYNTHETIC FIBERS AND FILAMENTS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Resin and synthetic rubber manufacturing and
- 2. Artificial and synthetic fibers and filaments manufacturing.

32521 RESIN AND SYNTHETIC RUBBER MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers and mixing and blending resins on a custom basis;
- 2. manufacturing noncustomized synthetic resins; and
- 3. manufacturing synthetic rubber.

325211 PLASTICS MATERIAL AND RESIN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in

- 1. manufacturing resins, plastics materials, and nonvulcanizable thermoplastic elastomers and mixing and blending resins on a custom basis and/or
- 2. manufacturing noncustomized synthetic resins.

325212 SYNTHETIC RUBBER MANUFACTURING

This U.S. industry consists of establishments primarily engaged in manufacturing synthetic rubber.

32522 ARTIFICIAL AND SYNTHETIC FIBERS AND FILAMENTS MANUFACTURING

This industry comprises establishments primarily engaged in one of the following:

- 1. manufacturing cellulosic (i.e., rayon and acetate) and noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or
- 2. manufacturing and texturing cellulosic and noncellulosic fibers and filaments.

325221 CELLULOSIC ORGANIC FIBER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. manufacturing cellulosic (i.e., rayon and acetate) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or
- 2. manufacturing and texturizing cellulosic fibers and filaments.

325222 NONCELLULOSIC ORGANIC FIBER MANUFACTURING

This U.S. industry consists of establishments primarily engaged in one of the following:

- 1. manufacturing noncellulosic (i.e., nylon, polyolefin, and polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow, or
- 2. manufacturing and texturizing noncellulosic fibers and filaments.

3253 PESTICIDE, FERTILIZER, AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

This industry group includes establishments classified in one of the following:

- 1. Fertilizer manufacturing and/or
- 2. Pesticide and other agricultural chemical manufacturing.

32531 FERTILIZER MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing nitrogenous or phosphatic fertilizer materials;
- 2. manufacturing fertilizers from sewage or animal waste;
- 3. manufacturing nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers; and
- 4. mixing ingredients made elsewhere into fertilizers.

325311 NITROGENOUS FERTILIZER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing nitrogenous fertilizer materials and mixing ingredients into fertilizers;
- 2. manufacturing fertilizers from sewage or animal waste; and
- 3. manufacturing nitrogenous materials and mixing them into fertilizers.

325312 PHOSPHATIC FERTILIZER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing phosphatic fertilizer materials or
- 2. manufacturing phosphatic materials and mixing them into fertilizers.

325314 FERTILIZER (MIXING ONLY) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in mixing ingredients made elsewhere into fertilizers.

32532 PESTICIDE AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

This industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

325320 PESTICIDE AND OTHER AGRICULTURAL CHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in the formulation and preparation of agricultural and household pest control chemicals (except fertilizers).

3254 PHARMACEUTICAL AND MEDICINE MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Manufacturing biological and medicinal products;
- 2. Processing (i.e., grading, grinding, and milling) botanical drugs and herbs;

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- 3. Isolating active medicinal principals from botanical drugs and herbs; and
- 4. Manufacturing pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

32541 PHARMACEUTICAL AND MEDICINE MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing biological and medicinal products;
- 2. processing (i.e., grading, grinding, and milling) botanical drugs and herbs;
- 3. isolating active medicinal principals from botanical drugs and herbs; and
- 4. manufacturing pharmaceutical products intended for internal and external consumption in such forms as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325411 MEDICINAL AND BOTANICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or
- 2. grading, grinding, and milling uncompounded botanicals.

325412 PHARMACEUTICAL PREPARATION MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325413 IN-VITRO DIAGNOSTIC SUBSTANCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

325414 BIOLOGICAL PRODUCT (EXCEPT DIAGNOSTIC) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

3255 PAINT, COATING, AND ADHESIVE MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Paint and coating manufacturing and/or
- 2. Adhesive manufacturing.

32551 PAINT AND COATING MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

 mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellant coatings for concrete and masonry, and/or

2. manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

325510 PAINT AND COATING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellant coatings for concrete and masonry and/or
- 2. manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit.

32552 ADHESIVE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

325520 ADHESIVE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

3256 SOAP, CLEANING COMPOUND, AND TOILET PREPARATION MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Soap and cleaning compound manufacturing and/or
- 2. Toilet preparation manufacturing.

32561 SOAP AND CLEANING COMPOUND MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and packaging soap and other cleaning compounds, surface active agents, and textile and leather finishing agents used to reduce tension or speed the drying process.

325611 SOAP AND OTHER DETERGENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging soaps and other detergents, such as laundry detergents; dishwashing detergents; toothpaste gels and tooth powders; and natural glycerin.

325612 POLISH AND OTHER SANITATION GOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and packaging polishes and specialty cleaning preparations.

325613 SURFACE ACTIVE AGENT MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing bulk surface active agents for use as wetting agents, emulsifiers, and penetrants, and/or
- 2. manufacturing textiles and leather finishing agents used to reduce tension or speed the drying process.

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32562 TOILET PREPARATION MANUFACTURING

This industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

325620 TOILET PREPARATION MANUFACTURING

This U.S. industry comprises establishments primarily engaged in preparing, blending, compounding, and packaging toilet preparations, such as perfumes, shaving preparations, hair preparations, face creams, lotions (including sunscreens), and other cosmetic preparations.

3259 OTHER CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

32591 PRINTING INK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

325910 PRINTING INK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing printing and inkjet inks and inkjet cartridges.

32592 EXPLOSIVES MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing explosives.

325920 EXPLOSIVES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing explosives.

32599 ALL OTHER CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, and synthetic rubber; cellulosic and noncellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; and soaps, cleaning compounds, and toilet preparations; printing inks; and explosives).

325991 CUSTOM COMPOUNDING OF PURCHASED RESINS

This U.S. industry group comprises establishments primarily engaged in one or more of the following:

- 1. custom mixing and blending plastics resins made elsewhere or
- 2. reformulating plastics resins from recycled plastics products.

325992 PHOTOGRAPHIC FILM, PAPER, PLATE, AND CHEMICAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sensitized film, sensitized paper, sensitized cloth, sensitized plates, toners (i.e., for photocopiers, laser printers, and similar electrostatic printing devices), toner cartridges, and photographic chemicals.

325998 ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals, resins, synthetic rubber; cellulosic and noncellulosic fiber and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings and adhesives; soap, cleaning compounds, and toilet preparations; printing inks; explosives; custom compounding of purchased resins; and photographic films, papers, plates, and chemicals).

326 PLASTICS AND RUBBER PRODUCTS MANUFACTURING

Industries in the Plastics and Rubber Products Manufacturing subsector make goods by processing plastics materials and raw rubber. The core technology employed by establishments in this subsector is that of plastics or rubber product production. Plastics and rubber are combined in the same subsector because plastics are increasingly being used as a substitute for rubber; however the subsector is generally restricted to the production of products made of just one material, either solely plastics or rubber.

Many manufacturing activities use plastics or rubber, for example the manufacture of footwear, or furniture. Typically, the production process of these products involves more than one material. In these cases, technologies that allow disparate materials to be formed and combined are of central importance in describing the manufacturing activity. In NAICS, such activities (the footwear and furniture manufacturing) are not classified in the Plastics and Rubber Products Manufacturing subsector because the core technologies for these activities are diverse and involve multiple materials.

Within the Plastics and Rubber Products Manufacturing subsector, a distinction is made between plastics and rubber products at the industry group level, although it is not a rigid distinction, as can be seen from the definition of Industry 32622, Rubber and Plastics Hoses and Belting Manufacturing. As materials technology progresses, plastics are increasingly being used as a substitute for rubber; and eventually, the distinction may disappear as a basis for establishment classification.

In keeping with the core technology focus of plastics, lamination of plastics film to plastics film as well as the production of bags from plastics only is classified in this subsector. Lamination and bag production involving plastics and materials other than plastics are classified in the NAICS Subsector 322, Paper Manufacturing.

3261 PLASTICS PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

32611 PLASTICS PACKAGING MATERIALS AND UNLAMINATED FILM AND SHEET MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. converting plastics resins into unsupported plastics film and sheet and/or
- 2. forming, coating or laminating plastics film and sheet into plastics bags.

326111 PLASTICS BAG MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

1. converting plastics resins into plastics bags or

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2. forming, coating, or laminating plastics film and sheet into single wall or multiwall plastics bags.

Establishments in this industry may print on the bags they manufacture.

326112 PLASTICS PACKAGING FILM AND SHEET (INCLUDING LAMINATED) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics packaging (flexible) film and packaging sheet.

326113 UNLAMINATED PLASTICS FILM AND SHEET (EXCEPT PACKAGING) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting plastics resins into plastics film and unlaminated sheet (except packaging).

32612 PLASTICS PIPE, PIPE FITTING, AND UNLAMINATED PROFILE SHAPE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing plastics pipes and pipe fittings, and plastics profile shapes such as rod, tube, and sausage casings.

326121 UNLAMINATED PLASTICS PROFILE SHAPE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting plastics resins into nonrigid plastics profile shapes (except film, sheet, and bags), such as rod, tube, and sausage casings.

326122 PLASTICS PIPE AND PIPE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in converting plastics resins into rigid plastics pipes and pipe fittings.

32613 LAMINATED PLASTICS PLATE, SHEET (EXCEPT PACKAGING), AND SHAPE MANUFACTURING

This industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

326130 LAMINATED PLASTICS PLATE, SHEET (EXCEPT PACKAGING), AND SHAPE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in laminating plastics profile shapes such as plate, sheet (except packaging), and rod. The lamination process generally involves bonding or impregnating profiles with plastics resins and compressing them under heat.

32614 POLYSTYRENE FOAM PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

326140 POLYSTYRENE FOAM PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing polystyrene foam products.

32615 URETHANE AND OTHER FOAM PRODUCT (EXCEPT POLYSTYRENE) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

326150 URETHANE AND OTHER FOAM PRODUCT (EXCEPT POLYSTYRENE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics foam products (except polystyrene).

32616 PLASTICS BOTTLE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing plastics bottles.

326160 PLASTICS BOTTLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics bottles.

32619 OTHER PLASTICS PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing resilient floor covering and other plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, and bottles).

326191 PLASTICS PLUMBING FIXTURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics or fiber-glass plumbing fixtures. Examples of products made by these establishments are plastics or fiber-glass bathtubs, hot tubs, portable toilets, and shower stalls.

326192 RESILIENT FLOOR COVERING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing resilient floor coverings for permanent installation.

326199 ALL OTHER PLASTICS PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics products (except film, sheet, bags, profile shapes, pipes, pipe fittings, laminates, foam products, bottles, plumbing fixtures, and resilient floor coverings).

3262 RUBBER PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in processing natural, and synthetic or reclaimed rubber materials into intermediate or final products using processes such as vulcanizing, cementing, molding, extruding, and lathe-cutting.

32621 TIRE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber and retreading or rebuilding tires.

326211 TIRE MANUFACTURING (EXCEPT RETREADING)

This U.S. industry comprises establishments primarily engaged in manufacturing tires and inner tubes from natural and synthetic rubber.

326212 TIRE RETREADING

This U.S. industry comprises establishments primarily engaged in retreading or rebuilding tires.

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32622 RUBBER AND PLASTICS HOSES AND BELTING MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

326220 RUBBER AND PLASTICS HOSES AND BELTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing rubber hose and/or plastics (reinforced) hose and belting from natural and synthetic rubber and/or plastics resins. Establishments manufacturing garden hoses from purchased hose are included in this industry.

32629 OTHER RUBBER PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing rubber products (except tires, hoses, and belting) from natural and synthetic rubber.

326291 RUBBER PRODUCT MANUFACTURING FOR MECHANICAL USE

This U.S. industry comprises establishments primarily engaged in molding, extruding, or lathecutting rubber to manufacture rubber goods (except tubing) for mechanical applications. Products of this industry are generally parts for motor vehicles, machinery, and equipment.

326299 ALL OTHER RUBBER PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing rubber products (except tires; hoses and belting; and molded, extruded, and lathe-cut rubber goods for mechanical applications) from natural and synthetic rubber.

327 NONMETALLIC MINERAL PRODUCT MANUFACTURING

The Nonmetallic Mineral Product Manufacturing subsector transforms mined or quarried nonmetallic minerals, such as sand, gravel, stone, clay, and refractory materials, into products for intermediate or final consumption. Processes used include grinding, mixing, cutting, shaping, and honing. Heat often is used in the process and chemicals are frequently mixed to change the composition, purity, and chemical properties for the intended product. For example, glass is produced by heating silica sand to the melting point (sometimes combined with cullet or recycled glass) and then drawn, floated, or blow molded to the desired shape or thickness. Refractory materials are heated and then formed into bricks or other shapes for use in industrial applications. The Nonmetallic Mineral Product Manufacturing subsector includes establishments that manufacture products, such as bricks, refractories, ceramic products, and glass and glass products, such as plate glass and containers. Also included are cement and concrete products, lime, gypsum and other nonmetallic mineral products including abrasive products, ceramic plumbing fixtures, statuary, cut stone products, and mineral wool. The products are used in a wide range of activities from construction and heavy and light manufacturing to articles for personal use.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals and further process the nonmetallic minerals into a more finished manufactured product are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more-finished manufactured product will be classified in the Manufacturing Sector.

Excluded from the Nonmetallic Mineral Product Manufacturing subsector are establishments that primarily beneficiate mined nonmetallic minerals. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. Beneficiation establishments are included in Sector 21, Mining.

3271 CLAY PRODUCT AND REFRACTORY MANUFACTURING

This industry group comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials and/or shaping, molding, baking, burning, or hardening clay refractories, non-clay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

32711 POTTERY, CERAMICS, AND PLUMBING FIXTURE MANUFACTURING

This industry comprises establishments primarily engaged in shaping, molding, glazing, and firing pottery, ceramics, and plumbing fixtures made entirely or partly of clay or other ceramic materials.

327111 VITREOUS CHINA PLUMBING FIXTURE AND CHINA AND EARTHENWARE BATHROOM ACCESSORIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing vitreous china plumbing fixtures and china and earthenware bathroom accessories, such as faucet handles, towel bars, and soap dishes.

327112 VITREOUS CHINA, FINE EARTHENWARE, AND OTHER POTTERY PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing table and kitchen articles, art and ornamental items, and similar vitreous china, fine earthenware, stoneware, coarse earthenware, and pottery products.

327113 PORCELAIN ELECTRICAL SUPPLY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing porcelain electrical insulators, molded porcelain parts for electrical devices, ferrite or ceramic magnets, and electronic and electrical supplies from nonmetallic minerals, such as clay and ceramic materials.

32712 CLAY BUILDING MATERIAL AND REFRACTORIES MANUFACTURING

This industry comprises establishments primarily engaged in shaping, molding, baking, burning, or hardening clay refractories, nonclay refractories, ceramic tile, structural clay tile, brick, and other structural clay building materials.

327121 BRICK AND STRUCTURAL CLAY TILE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing brick and structural clay tiles.

327122 CERAMIC WALL AND FLOOR TILE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ceramic wall and floor tiles.

327123 OTHER STRUCTURAL CLAY PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing clay sewer pipe, drain tile, flue lining tile, architectural terra-cotta, and other structural clay products.

327124 CLAY REFRACTORY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing clay refractory, mortar, brick, block, tile, and fabricated clay refractories, such as melting pots. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

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327125 NONCLAY REFRACTORY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonclay refractory, mortar, brick, block, tile, and fabricated nonclay refractories such as graphite, magnesite, silica, or alumina crucibles. A refractory is a material that will retain its shape and chemical identity when subjected to high temperatures and is used in applications that require extreme resistance to heat, such as furnace linings.

3272 GLASS AND GLASS PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

32721 GLASS AND GLASS PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing glass and/or glass products. Establishments in this industry may manufacture glass and/or glass products by melting silica sand or cullet, or purchasing glass.

327211 FLAT GLASS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing flat glass by melting silica sand or cullet; or
- 2. manufacturing both flat glass and laminated glass by melting silica sand or cullet.

327212 OTHER PRESSED AND BLOWN GLASS AND GLASSWARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing glass by melting silica sand or cullet and making pressed, blown, or shaped glass or glassware (except glass packaging containers).

327213 GLASS CONTAINER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing glass packaging containers.

327215 GLASS PRODUCT MANUFACTURING MADE OF PURCHASED GLASS

This U.S. industry comprises establishments primarily engaged in coating, laminating, tempering, or shaping purchased glass.

3273 CEMENT AND CONCRETE PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Cement manufacturing;
- 2. Ready-mix concrete manufacturing;
- 3. Concrete pipe, brick, and block manufacturing; and/or
- 4. Other concrete product manufacturing.

32731 CEMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

327310 CEMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing portland, natural, masonry, pozzalanic, and other hydraulic cements. Cement manufacturing establishments may calcine earths or mine, quarry, manufacture, or purchase lime.

32732 READY-MIX CONCRETE MANUFACTURING

This industry comprises establishments, such as batch plants or mix plants, primarily engaged in manufacturing concrete delivered to a purchaser in a plastic and unhardened state. Ready-mix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

327320 READY-MIX CONCRETE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing concrete delivered to a purchaser, such as batch plants or mix plants, in a plastic and unhardened state. Readymix concrete manufacturing establishments may mine, quarry, or purchase sand and gravel.

32733 CONCRETE PIPE, BRICK, AND BLOCK MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing concrete pipe, brick, and block.

327331 CONCRETE BLOCK AND BRICK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing concrete block and brick.

327332 CONCRETE PIPE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing concrete pipe.

32739 OTHER CONCRETE PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

327390 OTHER CONCRETE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing concrete products (except block, brick, and pipe).

3274 LIME AND GYPSUM PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells and/or gypsum products such as wallboard, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work.

32741 LIME MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

327410 LIME MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing lime from calcitic limestone, dolomitic limestone, or other calcareous materials, such as coral, chalk, and shells. Lime manufacturing establishments may mine, quarry, collect, or purchase the sources of calcium carbonate.

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32742 GYPSUM PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing gypsum products such as wallboard, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

327420 GYPSUM PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing gypsum products such as wallboard, plaster, plasterboard, molding, ornamental moldings, statuary, and architectural plaster work. Gypsum product manufacturing establishments may mine, quarry, or purchase gypsum.

3279 OTHER NONMETALLIC MINERAL PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except clay products, refractory products, glass products, cement and concrete products, lime, and gypsum products).

32791 ABRASIVE PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

327910 ABRASIVE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, abrasive-coated products, and other abrasive products.

32799 ALL OTHER NONMETALLIC MINERAL PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; and abrasive products).

327991 CUT STONE AND STONE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in cutting, shaping, and finishing granite, marble, limestone, slate, and other stone for building and miscellaneous uses. Stone product manufacturing establishments may mine, quarry, or purchase stone.

327992 GROUND OR TREATED MINERAL AND EARTH MANUFACTURING

This U.S. industry comprises establishments primarily engaged in calcining, dead burning, or otherwise processing beyond beneficiation, clays, ceramic and refractory minerals, barite, and miscellaneous nonmetallic minerals.

327993 MINERAL WOOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing mineral wool and mineral wool (i.e., fiberglass) insulation products made of such siliceous materials as rock, slag, and glass or combinations thereof.

327999 ALL OTHER MISCELLANEOUS NONMETALLIC MINERAL PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonmetallic mineral products (except pottery, ceramics, and plumbing fixtures; clay building materials and refractories; glass and glass products; cement; ready-mix concrete; concrete products; lime; gypsum products; abrasive products; cut stone and stone products; ground and treated minerals and earth; and mineral wool).

331 PRIMARY METAL MANUFACTURING

Industries in the Primary Metal Manufacturing subsector smelt and/or refine ferrous and nonferrous metals from ore, pig or scrap, using electrometallurgical and other process metallurgical techniques. Establishments in this subsector also manufacture metal alloys and superalloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing, and extruding operations to make sheet, strip, bar, rod, or wire, and in molten form to make castings and other basic metal products.

Primary manufacturing of ferrous and nonferrous metals begins with ore or concentrate as the primary input. Establishments manufacturing primary metals from ore and/or concentrate remain classified in the primary smelting, primary refining, or iron and steel mill industries regardless of the form of their output. Establishments primarily engaged in secondary smelting and/or secondary refining recover ferrous and nonferrous metals from scrap and/or dross. The output of the secondary smelting and/or secondary refining industries is limited to shapes, such as ingot or billet, that will be further processed. Recovery of metals from scrap often occurs in establishments that are primarily engaged in activities, such as rolling, drawing, extruding, or similar processes.

Excluded from the Primary Metal Manufacturing subsector are establishments primarily engaged in manufacturing ferrous and nonferrous forgings (except ferrous forgings made in steel mills) and stampings. Although forging, stamping, and casting are all methods used to make metal shapes, forging and stamping do not use molten metals and are included in Subsector 332, Fabricated Metal Product Manufacturing. Establishments primarily engaged in operating coke ovens are classified in Industry 32419, Other Petroleum and Coal Products Manufacturing.

3311 IRON AND STEEL MILLS AND FERROALLOY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Direct reduction of iron ore;
- 2. Manufacturing pig iron in molten or solid form;
- 3. Converting pig iron into steel;
- 4. Manufacturing ferroalloys;
- 5. Making steel;
- 6. Making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, and wire); and
- 7. Making steel and forming pipe and tube.

33111 IRON AND STEEL MILLS AND FERROALLOY MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. direct reduction of iron ore;
- 2. manufacturing pig iron in molten or solid form;
- 3. converting pig iron into steel;
- 4. manufacturing ferroalloys;
- 5. making steel;
- 6. making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, and wire); and
- 7. making steel and forming pipe and tube.

331111 IRON AND STEEL MILLS

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. direct reduction of iron ore;

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- 2. manufacturing pig iron in molten or solid form;
- 3. converting pig iron into steel;
- 4. making steel;
- 5. making steel and manufacturing shapes (e.g., bar, plate, rod, sheet, strip, wire); and
- 6. making steel and forming tube and pipe.

331112 ELECTROMETALLURGICAL FERROALLOY PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electrometallurgical ferroalloys. Ferroalloys add critical elements, such as silicon and manganese for carbon steel and chromium, vanadium, tungsten, titanium, and molybdenum for low- and high-alloy metals. Ferroalloys include iron-rich alloys and more pure forms of elements added during the steel manufacturing process that alter or improve the characteristics of the metal being made.

3312 STEEL PRODUCT MANUFACTURING FROM PURCHASED STEEL

This industry group comprises establishments primarily engaged in manufacturing iron and steel tube and pipe; drawing steel wire; and rolling or drawing shapes from purchased iron or steel.

33121 IRON AND STEEL PIPE AND TUBE MANUFACTURING FROM PURCHASED STEEL

This industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

331210 IRON AND STEEL PIPE AND TUBE MANUFACTURING FROM PURCHASED STEEL

This U.S. industry comprises establishments primarily engaged in manufacturing welded, riveted, or seamless pipe and tube from purchased iron or steel.

33122 ROLLING AND DRAWING OF PURCHASED STEEL

This industry comprises establishments primarily engaged in rolling and/or drawing steel shapes, such as plate, sheet, strip, rod, and bar, from purchased steel.

331221 ROLLED STEEL SHAPE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in rolling or drawing shapes (except wire), such as plate, sheet, strip, rod, and bar, from purchased steel.

331222 STEEL WIRE DRAWING

This U.S. industry comprises establishments primarily engaged in drawing wire from purchased steel.

3313 ALUMINA AND ALUMINUM PRODUCTION AND PROCESSING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Refining alumina;
- 2. Making (i.e., the primary production) aluminum from alumina;
- 3. Recovering aluminum from scrap or dross;
- 4. Alloying purchased aluminum; and
- 5. Manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, and wire).

33131 ALUMINA AND ALUMINUM PRODUCTION AND PROCESSING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. refining alumina;
- 2. making (i.e., the primary production) aluminum from alumina;
- 3. recovering aluminum from scrap or dross;
- 4. alloying purchased aluminum; and
- 5. manufacturing aluminum primary forms (e.g., bar, foil, pipe, plate, rod, sheet, tube, and wire).

331311 ALUMINA REFINING

This U.S. industry comprises establishments primarily engaged in refining alumina (i.e., aluminum oxide) generally from bauxite.

331312 PRIMARY ALUMINUM PRODUCTION

This U.S. industry comprises establishments primarily engaged in:

- 1. making aluminum from alumina and/or
- 2. making aluminum from alumina and rolling, drawing, extruding, or casting the aluminum they make into primary forms (e.g., bar, billet, ingot, plate, rod, sheet, and strip).

Establishments in this industry may make primary aluminum or aluminum-based alloys from alumina.

331314 SECONDARY SMELTING AND ALLOYING OF ALUMINUM

This U.S. industry comprises establishments primarily engaged in:

- 1. recovering aluminum and aluminum alloys from scrap and/or dross (i.e., secondary smelting) and making billet or ingot (except by rolling) and/or
- 2. manufacturing alloys, powder, paste, or flake from purchased aluminum.

331315 ALUMINUM SHEET, PLATE, AND FOIL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- flat rolling or continuous casting sheet, plate, foil, and welded tube from purchased aluminum and/or
- 2. recovering aluminum from scrap and flat rolling or continuous casting sheet, plate, foil, and welded tube in integrated mills.

331316 ALUMINUM EXTRUDED PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. extruding aluminum bar, pipe, and tube blooms or extruding or drawing tube from purchased aluminum and/or
- 2. recovering aluminum from scrap and extruding bar, pipe, and tube blooms or drawing tube in integrated mills.

331319 OTHER ALUMINUM ROLLING AND DRAWING

This U.S. industry comprises establishments primarily engaged in:

- rolling, drawing, or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) from purchased aluminum and/or
- 2. recovering aluminum from scrap and rolling, drawing or extruding shapes (except flat rolled sheet, plate, foil, and welded tube; extruded rod, bar, pipe, and tube blooms; and drawn or extruded tube) in integrated mills.

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3314 NONFERROUS METAL (EXCEPT ALUMINUM) PRODUCTION AND PROCESSING

This industry group comprises establishments primarily engaged in one of the following:

- 1. Nonferrous metal (except aluminum) smelting and refining;
- 2. Copper rolling, drawing, extruding, and alloying; and/or
- 3. Nonferrous metal (except copper and aluminum) rolling, drawing, extruding, and alloying.

33141 NONFERROUS METAL (EXCEPT ALUMINUM) SMELTING AND REFINING

This industry comprises establishments primarily engaged in:

- 1. smelting ores into nonferrous metals and/or
- the primary refining of nonferrous metals (except aluminum) using electrolytic or other processes.

331411 PRIMARY SMELTING AND REFINING OF COPPER

This U.S. industry comprises establishments primarily engaged in one of the following:

- 1. smelting copper ore and/or
- 2. the primary refining of copper by electrolytic methods or other processes.

Establishments in this industry make primary copper and copper-based alloys, such as brass and bronze, from ore or concentrates.

331419 PRIMARY SMELTING AND REFINING OF NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM)

This U.S. industry comprises establishments primarily engaged in:

- 1. making (primary production) nonferrous metals by smelting ore and/or
- 2. the primary refining of nonferrous metals by electrolytic methods or other processes.

33142 COPPER ROLLING, DRAWING, EXTRUDING, AND ALLOYING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. recovering copper or copper alloys from scraps;
- 2. alloying purchased copper;
- 3. rolling, drawing, or extruding shapes, (e.g., bar, plate, sheet, strip, tube, wire) from purchased copper; and
- 4. recovering copper or copper alloys from scrap and rolling drawing, or extruding shapes (e.g., bar, plate, sheet, strip, tube, wire).

331421 COPPER ROLLING, DRAWING, AND EXTRUDING

This U.S. industry comprises establishments primarily engaged in:

- 1. rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and tube (except bare or insulated copper communication or energy wire)) from purchased copper and/or
- recovering copper from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and tube (except bare or insulated copper communication or energy wire) in integrated mills.

331422 COPPER WIRE (EXCEPT MECHANICAL) DRAWING

This U.S. industry comprises establishments primarily engaged in drawing or drawing and insulating communication and energy wire and cable from purchased copper or in integrated secondary smelting and wire drawing plants.

331423 SECONDARY SMELTING, REFINING, AND ALLOYING OF COPPER

This U.S. industry comprises establishments primarily engaged in:

- 1. recovering copper and copper alloys from scrap and/or
- 2. alloying purchased copper.

Establishments in this industry make primary forms, such as ingot, wire bar, cake, and slab from copper or copper alloys, such as brass and bronze.

33149 NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM) ROLLING, DRAWING, EXTRUDING, AND ALLOYING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. recovering nonferrous metals (except copper and aluminum) and nonferrous metal alloys from scrap;
- 2. alloying purchased nonferrous metals (except copper and aluminum);
- 3. rolling, drawing, and extruding shapes from purchased nonferrous metals (except copper and aluminum); and
- 4. recovering nonferrous metals from scrap (except copper and aluminum) and rolling, drawing, or extruding shapes in integrated facilities.

331491 NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM) ROLLING, DRAWING, AND EXTRUDING

This U.S. industry comprises establishments primarily engaged in:

- 1. rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and tube) from purchased nonferrous metals and/or
- 2. recovering nonferrous metals from scrap and rolling, drawing, and/or extruding shapes (e.g., bar, plate, sheet, strip, and tube) in integrated mills.

331492 SECONDARY SMELTING, REFINING, AND ALLOYING OF NONFERROUS METAL (EXCEPT COPPER AND ALUMINUM)

This U.S. industry comprises establishments primarily engaged in:

- 1. alloying purchased nonferrous metals and/or
- 2. recovering nonferrous metals from scrap.

Establishments in this industry make primary forms (e.g., bar, billet, bloom, cake, ingot, slab, slug, and wire) using smelting or refining processes.

3315 FOUNDRIES

This industry group comprises establishments primarily engaged in pouring molten metal into molds or dies to form castings. Establishments making castings and further manufacturing, such as machining or assembling, a specific manufactured product are classified in the industry of the finished product. Foundries may perform operations, such as cleaning and deburring, on the castings they manufacture. More involved processes, such as tapping, threading, milling, or machining to tight tolerances, that transform castings into more finished products are classified elsewhere in the manufacturing sector based on the product being made.

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Establishments in this industry group make castings from purchased metals or in integrated secondary smelting and casting facilities. When the production of primary metals is combined with making castings, the establishment is classified in 331 with the primary metal being made.

33151 FERROUS METAL FOUNDRIES

This industry comprises establishments primarily engaged in pouring molten iron and steel into molds of a desired shape to made castings. Establishments in this industry purchase iron and steel made in other establishments.

331511 IRON FOUNDRIES

This U.S. industry comprises establishments primarily engaged in pouring molten pig iron or iron alloys into molds to manufacture castings (e.g., cast iron manhole covers, cast iron pipe, cast iron skillets). Establishments in this industry purchase iron made in other establishments.

331512 STEEL INVESTMENT FOUNDRIES

This U.S. industry comprises establishments primarily engaged in manufacturing steel investment castings. Investment molds are formed by covering a wax shape with a refractory slurry. After the refractory slurry hardens, the wax is melted, leaving a seamless mold. Investment molds provide highly detailed, consistent castings. Establishments in this industry purchase steel made in other establishments.

331513 STEEL FOUNDRIES (EXCEPT INVESTMENT)

This U.S. industry comprises establishments primarily engaged in manufacturing steel castings (except steel investment castings). Establishments in this industry purchase steel made in other establishments.

33152 NONFERROUS METAL FOUNDRIES

This industry comprises establishments primarily engaged in pouring and/or introducing molten nonferrous metal, under high pressure, into metal molds or dies to manufacture castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331521 ALUMINUM DIE-CASTING FOUNDRIES

This U.S. industry comprises establishments primarily engaged in introducing molten aluminum, under high pressure, into molds or dies to make aluminum die-castings. Establishments in this industry purchase aluminum made in other establishments.

331522 NONFERROUS (EXCEPT ALUMINUM) DIE-CASTING FOUNDRIES

This U.S. industry comprises establishments primarily engaged in introducing molten nonferrous metal (except aluminum), under high pressure, into molds to make nonferrous metal die-castings. Establishments in this industry purchase nonferrous metals made in other establishments.

331524 ALUMINUM FOUNDRIES (EXCEPT DIE-CASTING)

This U.S. industry comprises establishments primarily engaged in pouring molten aluminum into molds to manufacture aluminum castings. Establishments in this industry purchase aluminum made in other establishments.

331525 COPPER FOUNDRIES (EXCEPT DIE-CASTING)

This U.S. industry comprises establishments primarily engaged in pouring molten copper into molds to manufacture copper castings. Establishments in this industry purchase copper made in other establishments.

331528 OTHER NONFERROUS FOUNDRIES (EXCEPT DIE-CASTING)

This U.S. industry comprises establishments primarily engaged in pouring molten nonferrous metals (except aluminum and copper) into molds to manufacture nonferrous castings (except aluminum die-castings, nonferrous (except aluminum) die-castings, aluminum castings, and copper castings). Establishments in this industry purchase nonferrous metals, such as nickel, lead, and zinc, made in other establishments.

332 FABRICATED METAL PRODUCT MANUFACTURING

Industries in the Fabricated Metal Product Manufacturing subsector transform metal into intermediate or end products, other than machinery, computers and electronics, and metal furniture or treating metals and metal formed products fabricated elsewhere. Important fabricated metal processes are forging, stamping, bending, forming, and machining, used to shape individual pieces of metal; and other processes, such as welding and assembling, used to join separate parts together. Establishments in this subsector may use one of these processes or a combination of these processes.

The NAICS structure for this subsector distinguishes the forging and stamping processes in a single industry. The remaining industries, in the subsector, group establishments based on similar combinations of processes used to make products.

The manufacturing performed in the Fabricated Metal Product Manufacturing subsector begins with manufactured metal shapes. The establishments in this sector further fabricate the purchased metal shapes into a product. For instance, the Spring and Wire Product Manufacturing industry starts with wire and fabricates such items.

Within manufacturing there are other establishments that make the same products made by this subsector; only these establishments begin production further back in the production process. These establishments have a more integrated operation. For instance, one establishment may manufacture steel, draw it into wire, and make wire products in the same establishment. Such operations are classified in the Primary Metal Manufacturing subsector.

3321 FORGING AND STAMPING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Manufacturing forgings from purchased metals;
- 2. Manufacturing metal custom roll forming products;
- 3. Manufacturing metal stamped and spun products (except automotive, cans, and coins); and
- 4. Manufacturing powder metallurgy products.

Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining and assembling) a specific manufactured product are classified in the industry of the finished product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

33211 FORGING AND STAMPING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing forgings from purchased metals;
- 2. manufacturing metal custom roll forming products;
- 3. manufacturing metal stamped and spun products (except automotive, cans, and coins); and
- 4. manufacturing powder metallurgy products.

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Establishments making metal forgings, metal stampings, and metal spun products and further manufacturing (e.g., machining and assembling) a specific manufactured product are classified in the industry of the finished product. Metal forging, metal stamping, and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332111 IRON AND STEEL FORGING

This U.S. industry comprises establishments primarily engaged in manufacturing iron and steel forgings from purchased iron and steel by hammering mill shapes. Establishments making iron and steel forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Iron and steel forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

332112 NONFERROUS FORGING

This U.S. industry comprises establishments primarily engaged in manufacturing nonferrous forgings from purchased nonferrous metals by hammering mill shapes. Establishments making nonferrous forgings and further manufacturing (e.g., machining, assembling) a specific manufactured product are classified in the industry of the finished product. Nonferrous forging establishments may perform surface finishing operations, such as cleaning and deburring, on the forgings they manufacture.

332114 CUSTOM ROLL FORMING

This U.S. industry comprises establishments primarily engaged in custom roll forming metal products by use of rotary motion of rolls with various contours to bend or shape the products.

332115 CROWN AND CLOSURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in stamping metal crowns and closures, such as bottle caps and home canning lids and rings.

332116 METAL STAMPING

This U.S. industry comprises establishments primarily engaged in manufacturing unfinished metal stampings and spinning unfinished metal products (except crowns, cans, closures, automotive, and coins). Establishments making metal stampings and metal spun products and further manufacturing (e.g., machining, assembling) a specific product are classified in the industry of the finished product. Metal stamping and metal spun products establishments may perform surface finishing operations, such as cleaning and deburring, on the products they manufacture.

332117 POWDER METALLURGY PART MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing powder metallurgy products by compacting them in a shaped die and sintering. Establishments in this industry generally make a wide range of parts on a job or order basis.

3322 CUTLERY AND HANDTOOL MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Manufacturing nonprecious and precious plated metal cutlery and flatware;
- 2. Manufacturing nonpowered hand and edge tools;
- 3. Manufacturing nonpowered handsaws;
- 4. Manufacturing saw blades, all types (including those for sawing machines); and

5. Manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

33221 CUTLERY AND HANDTOOL MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing nonprecious and precious plated metal cutlery and flatware;
- 2. manufacturing nonpowered hand and edge tools;
- 3. manufacturing nonpowered handsaws;
- 4. manufacturing saw blades, all types (including those for sawing machines); and
- 5. manufacturing metal kitchen utensils (except cutting-type) and pots and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

332211 CUTLERY AND FLATWARE (EXCEPT PRECIOUS) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonprecious and precious plated metal cutlery and flatware.

332212 HAND AND EDGE TOOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonpowered hand and edge tools (except saws).

332213 SAW BLADE AND HANDSAW MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing nonpowered handsaws and/or
- 2. manufacturing saw blades, all types (including those for power sawing machines).

332214 KITCHEN UTENSIL, POT, AND PAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal kitchen utensils (except cutting-type), pots, and pans (except those manufactured by casting (e.g., cast iron skillets) or stamped without further fabrication).

3323 ARCHITECTURAL AND STRUCTURAL METALS MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing one or more of the following:

- 1. Plate work and fabricated structural product manufacturing and
- 2. Ornamental and architectural metal products manufacturing.

33231 PLATE WORK AND FABRICATED STRUCTURAL PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following:

- 1. prefabricated metal buildings, panels and sections;
- 2. structural metal products; and
- 3. metal plate work products.

332311 PREFABRICATED METAL BUILDING AND COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing prefabricated metal buildings, panels, and sections.

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332312 FABRICATED STRUCTURAL METAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in fabricating structural metal products, such as concrete reinforcing bars and fabricated bar joists.

332313 PLATE WORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal plate work by cutting, punching, bending, shaping, and welding purchased metal plate.

33232 ORNAMENTAL AND ARCHITECTURAL METAL PRODUCTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following:

- 1. metal framed windows (i.e., typically using purchased glass) and metal doors;
- 2. sheet metal work; and
- 3. ornamental and architectural metal products.

332321 METAL WINDOW AND DOOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal framed windows (typically using purchased glass) and metal doors. Examples of products made by these establishments are: metal door frames; metal framed window and door screens; and metal molding and trim (except automotive).

332322 SHEET METAL WORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sheet metal work (except stampings).

332323 ORNAMENTAL AND ARCHITECTURAL METAL WORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ornamental and architectural metal work, such as staircases, metal open steel flooring, fire escapes, railings, and scaffolding.

3324 BOILER, TANK, AND SHIPPING CONTAINER MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Power boiler and heat exchanger manufacturing;
- 2. Metal tank (heavy gauge) manufacturing; and
- 3. Metal can, box, and other metal container (light gauge) manufacturing.

33241 POWER BOILER AND HEAT EXCHANGER MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

332410 POWER BOILER AND HEAT EXCHANGER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power boilers and heat exchangers. Establishments in this industry may perform installation in addition to manufacturing power boilers and heat exchangers.

33242 METAL TANK (HEAVY GAUGE) MANUFACTURING

This industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

332420 METAL TANK (HEAVY GAUGE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in cutting, forming, and joining heavy gauge metal to manufacture tanks, vessels, and other containers.

33243 METAL CAN, BOX, AND OTHER METAL CONTAINER (LIGHT GAUGE) MANUFACTURING

This industry comprises establishments primarily engaged in forming light gauge metal containers.

332431 METAL CAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal cans, lids, and ends.

332439 OTHER METAL CONTAINER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal (light gauge) containers (except cans).

3325 HARDWARE MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

33251 HARDWARE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

332510 HARDWARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal hardware, such as metal hinges, metal handles, keys, and locks (except coin-operated and time locks).

3326 SPRING AND WIRE PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in:

- 1. Manufacturing steel springs by forming, such as cutting, bending, and heat winding, metal rod or strip stock, and/or
- 2. Manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

33261 SPRING AND WIRE PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in:

- 1. manufacturing steel springs by forming, such as cutting, bending, and heat winding, metal rod or strip stock, and/or
- 2. manufacturing wire springs and fabricated wire products from wire drawn elsewhere (except watch and clock springs).

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332611 SPRING (HEAVY GAUGE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing heavy gauge springs by forming, such as cutting, bending, and heat winding, rod or strip stock.

332612 SPRING (LIGHT GAUGE) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing light gauge springs from purchased wire or strip.

332618 OTHER FABRICATED WIRE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated wire products (except springs) made from purchased wire.

3327 MACHINE SHOPS; TURNED PRODUCT; AND SCREW, NUT, AND BOLT MANUFACTURING

This industry group comprises establishments primarily engaged in:

- 1. Machine shops and/or
- 2. Turned product and screw, nut, and bolt manufacturing.

33271 MACHINE SHOPS

This industry comprises establishments primarily engaged in machining metal parts on a job or order basis (known as machine shops). Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

332710 MACHINE SHOPS

This U.S. industry comprises establishments primarily engaged in machining metal parts on a job or order basis (known as machine shops). Generally machine shop jobs are low volume using machine tools, such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling.

33272 TURNED PRODUCT AND SCREW, NUT, AND BOLT MANUFACTURING

This industry comprises establishments primarily engaged in:

- 1. machining precision turned products or
- 2. manufacturing metal bolts, nuts, screws, rivets, and other industrial fasteners.

Included in this industry are establishments primarily engaged in manufacturing parts for machinery and equipment on a customized basis.

332721 PRECISION TURNED PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in machining precision products of all materials on a job or order basis (known as precision turned manufacturers). Generally precision turned product jobs are large volume using machines, such as automatic screw machines, rotary transfer machines, computer numerically controlled (CNC) lathes, or turning centers.

332722 BOLT, NUT, SCREW, RIVET, AND WASHER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal bolts, nuts, screws, rivets, washers, and other industrial fasteners using machines, such as headers, threaders, and nut forming machines.

3328 COATING, ENGRAVING, HEAT TREATING, AND ALLIED ACTIVITIES

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Heat treating metals and metal products;
- 2. Enameling, lacquering, and varnishing metals and metal products;
- 3. Hot dip galvanizing metals and metal products;
- 4. Engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates);
- 5. Powder coating metals and metal products;
- 6. Electroplating, plating, anodizing, coloring, and finishing metals and metal products; and
- 7. Providing other metal surfacing services for the trade.

Included in this industry are establishments that coat engravings and heat treat metals and metal formed products fabricated elsewhere.

33281 COATING, ENGRAVING, HEAT TREATING, AND ALLIED ACTIVITIES

This industry comprises establishments primarily engaged in one or more of the following:

- 1. heat treating metals and metal products;
- 2. enameling, lacquering, and varnishing metals and metal products;
- 3. hot dip galvanizing metals and metal products;
- 4. engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates);
- 5. powder coating metals and metal products;
- 6. electroplating, plating, anodizing, coloring, and finishing metals and metal products; and
- 7. providing other metal surfacing services for the trade.

Included in this industry are establishments that coat engravings and heat treat metals and metal formed products fabricated elsewhere.

332811 METAL HEAT TREATING

This U.S. industry comprises establishments primarily engaged in heat treating, such as annealing, tempering, and brazing metals and metal products for the trade.

332812 METAL COATING, ENGRAVING (EXCEPT JEWELRY AND SILVERWARE), AND ALLIED SERVICES TO MANUFACTURERS

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. enameling, lacquering, and varnishing metals and metal products;
- 2. hot dip galvanizing metals and metal products;
- 3. engraving, chasing, or etching metals and metal products (except jewelry; personal goods carried on or about the person, such as compacts and cigarette cases; precious metal products (except precious plated flatware and other plated ware); and printing plates);
- 4. powder coating metals and metal products; and
- 5. providing other metal surfacing services for the trade.

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332813 ELECTROPLATING, PLATING, POLISHING, ANODIZING, AND COLORING

This U.S. industry comprises establishments primarily engaged in electroplating, plating, anodizing, coloring, buffing, polishing, cleaning, and sandblasting metals and metal products for the trade.

3329 OTHER FABRICATED METAL PRODUCT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, and nuts and bolts).

33291 METAL VALVE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following metal valves:

- 1. industrial valves;
- 2. fluid power valves and hose fittings;
- 3. plumbing fixture fittings and trim; and
- 4. other metal valves and pipe fittings.

332911 INDUSTRIAL VALVE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial valves and valves for water works and municipal water systems.

332912 FLUID POWER VALVE AND HOSE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings.

332913 PLUMBING FIXTURE FITTING AND TRIM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal and plastics plumbing fixture fittings and trim, such as faucets, flush valves, and shower heads.

332919 OTHER METAL VALVE AND PIPE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal valves (except industrial valves, fluid power valves, fluid power hose fittings, and plumbing fixture fittings and trim).

33299 ALL OTHER FABRICATED METAL PRODUCT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metal products, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, and metal valves).

332991 BALL AND ROLLER BEARING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ball and roller bearings of all materials.

332992 SMALL ARMS AMMUNITION MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing small arms ammunition.

332993 AMMUNITION (EXCEPT SMALL ARMS) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ammunition (except small arms). Examples of products made by these establishments are bombs, depth charges, rockets (except guided missiles), grenades, mines, and torpedoes.

332994 SMALL ARMS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing small firearms that are carried and fired by the individual.

332995 OTHER ORDNANCE AND ACCESSORIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ordnance (except small arms) and accessories.

332996 FABRICATED PIPE AND PIPE FITTING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in fabricating, such as cutting, threading, and bending metal pipes and pipe fittings made from purchased metal pipe.

332997 INDUSTRIAL PATTERN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial patterns.

332998 ENAMELED IRON AND METAL SANITARY WARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing enameled iron and metal sanitary ware.

332999 ALL OTHER MISCELLANEOUS FABRICATED METAL PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fabricated metal products (except forgings and stampings, cutlery and handtools, architectural and structural metals, boilers, tanks, shipping containers, hardware, spring and wire products, machine shop products, turned products, screws, nuts and bolts, metal valves, ball and roller bearings, ammunition, small arms and other ordnances, fabricated pipes and pipe fittings, industrial patterns, and enameled iron and metal sanitary ware).

333 MACHINERY MANUFACTURING

Industries in the Machinery Manufacturing subsector create end products that apply mechanical force, for example, the application of gears and levers, to perform work. Some important processes for the manufacture of machinery are forging, stamping, bending, forming, and machining that are used to shape individual pieces of metal. Processes, such as welding and assembling are used to join separate parts together. Although these processes are similar to those used in metal fabricating establishments, machinery manufacturing is different because it typically employs multiple metal forming processes in manufacturing the various parts of the machine. Moreover, complex assembly operations are an inherent part of the production process.

In general, design considerations are very important in machinery production. Establishments specialize in making machinery designed for particular applications. Thus, design is considered to be part of the production process for the purpose of implementing NAICS. The NAICS structure reflects this by defining industries and industry groups that make machinery for different applications. A broad distinction exists between machinery that is generally used in a variety of industrial applications (i.e., general purpose machinery) and machinery that is designed to be used in a particular industry (i.e., special purpose machinery). Three industry groups consist of special purpose machinery-Agricultural, Construction, and Mining Machinery Manufacturing; Industrial Machinery

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Manufacturing; and Commercial and Service Industry Machinery Manufacturing. The other industry groups make general-purpose machinery: Ventilation, Heating, Air Conditioning, and Commercial Refrigeration Equipment Manufacturing; Metalworking Machinery Manufacturing; Engine, Turbine, and Power Transmission Equipment Manufacturing; and Other General Purpose Machinery Manufacturing.

3331 AGRICULTURE, CONSTRUCTION, AND MINING MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Agricultural implement manufacturing;
- 2. Construction machinery manufacturing; and
- 3. Mining and oil and gas field machinery manufacturing.

33311 AGRICULTURAL IMPLEMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing farm machinery and equipment, powered mowing equipment, and other powered home lawn and garden equipment.

333111 FARM MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing agricultural and farm machinery and equipment and other turf and grounds care equipment, including planting, harvesting, and grass mowing equipment (except lawn and garden-type).

333112 LAWN AND GARDEN TRACTOR AND HOME LAWN AND GARDEN EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing powered lawn-mowers, lawn and garden tractors, and other home lawn and garden equipment, such as tillers, shredders, and yard vacuums and blowers.

33312 CONSTRUCTION MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

333120 CONSTRUCTION MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing construction machinery, surface mining machinery, and logging equipment.

33313 MINING AND OIL AND GAS FIELD MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing oil and gas field and underground mining machinery and equipment.

333131 MINING MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing underground mining machinery and equipment, such as coal breakers, mining cars, core drills, coal cutters, and rock drills and
- 2. manufacturing mineral beneficiating machinery and equipment used in surface or underground mines.

333132 OIL AND GAS FIELD MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing oil and gas field machinery and equipment, such as oil and gas field drilling machinery and equipment; oil and gas field production machinery and equipment; and oil and gas field derricks; and
- 2. manufacturing water well drilling machinery.

3332 INDUSTRIAL MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Sawmill and woodworking machinery manufacturing;
- 2. Plastics and rubber industry machinery manufacturing; and
- 3. Other industrial machinery manufacturing.

33321 SAWMILL AND WOODWORKING MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

333210 SAWMILL AND WOODWORKING MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sawmill and woodworking machinery (except handheld), such as circular and band sawing equipment, planing machinery, and sanding machinery.

33322 PLASTICS AND RUBBER INDUSTRY MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

333220 PLASTICS AND RUBBER INDUSTRY MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing plastics and rubber products making machinery, such as plastics compression, extrusion and injection molding machinery and equipment, and tire building and recapping machinery and equipment.

33329 OTHER INDUSTRIAL MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction, mining, sawmill and woodworking, and plastics and rubber products making machinery).

333291 PAPER INDUSTRY MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing paper industry machinery for making paper and paper products, such as pulp making machinery, paper and paperboard making machinery, and paper and paperboard converting machinery.

333292 TEXTILE MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing textile machinery for making thread, yarn, and fiber.

333293 PRINTING MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing printing and bookbinding machinery and equipment, such as printing presses, typesetting machinery, and bindery machinery.

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333294 FOOD PRODUCT MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing food and beverage manufacturing-type machinery and equipment, such as dairy product plant machinery and equipment (e.g., homogenizers, pasteurizers, and ice cream freezers), bakery machinery and equipment (e.g., dough mixers, bake ovens, and pastry rolling machines), meat and poultry processing and preparation machinery, and other commercial food products machinery (e.g., slicers, choppers, and mixers).

333295 SEMICONDUCTOR MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wafer processing equipment, semiconductor assembly and packaging equipment, and other semiconductor making machinery.

333298 ALL OTHER INDUSTRIAL MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial machinery (except agricultural and farm-type, construction and mining machinery, sawmill and woodworking machinery, plastics and rubber making machinery, paper and paperboard making machinery, textile machinery, printing machinery and equipment, food manufacturing-type machinery, and semiconductor making machinery).

3333 COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and drycleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

33331 COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing commercial and service machinery, such as automatic vending machinery, commercial laundry and dry-cleaning machinery, office machinery, photographic and photocopying machinery, optical instruments and machinery, automotive maintenance equipment (except mechanic's handtools), industrial vacuum cleaners, and commercial-type cooking equipment.

333311 AUTOMATIC VENDING MACHINE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing coin, token, currency, or magnetic card operated vending machines; and/or
- 2. manufacturing coin operated mechanism for machines, such as vending machines, lockers, and laundry machines.

333312 COMMERCIAL LAUNDRY, DRYCLEANING, AND PRESSING MACHINE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and industrial laundry and drycleaning equipment and pressing machines.

333313 OFFICE MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing office machinery (except computers and photocopying equipment), such as mailhandling machinery and equipment, calculators, typewriters, and dedicated word processing equipment.

333314 OPTICAL INSTRUMENT AND LENS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing optical instruments and lens, such as binoculars, microscopes (except electron and proton), telescopes, prisms, and lenses (except ophthalmic);
- 2. coating or polishing lenses (except ophthalmic); and
- 3. mounting lenses (except ophthalmic).

333315 PHOTOGRAPHIC AND PHOTOCOPYING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing photographic and photocopying equipment, such as cameras (except television, video, and digital), projectors, film developing equipment, photocopying equipment, and microfilm equipment.

333319 OTHER COMMERCIAL AND SERVICE INDUSTRY MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial and service industry equipment (except automatic vending machines, commercial laundry, drycleaning and pressing machines, office machinery, optical instruments and lenses, and photographic and photocopying equipment).

3334 VENTILATION, HEATING, AIR-CONDITIONING, AND COMMERCIAL REFRIGERATION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing ventilation, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

33341 VENTILATION, HEATING, AIR-CONDITIONING, AND COMMERCIAL REFRIGERATION EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing ventilation, heating, air-conditioning, and commercial and industrial refrigeration and freezer equipment.

333411 AIR PURIFICATION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing stationary air purification equipment, such as industrial dust and fume collection equipment, electrostatic precipitation equipment, warm air furnace filters, air washers, and other dust collection equipment.

333412 INDUSTRIAL AND COMMERCIAL FAN AND BLOWER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing attic fans and industrial and commercial fans and blowers, such as commercial exhaust fans and commercial ventilating fans.

333414 HEATING EQUIPMENT (EXCEPT WARM AIR FURNACES) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing heating equipment (except electric and warm air furnaces), such as heating boilers, heating stoves, floor and wall furnaces, and wall and baseboard heating units.

333415 AIR-CONDITIONING AND WARM AIR HEATING EQUIPMENT AND COMMERCIAL AND INDUSTRIAL REFRIGERATION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing air-conditioning (except motor vehicle) and warm air furnace equipment and/or
- 2. manufacturing commercial and industrial refrigeration and freezer equipment.

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3335 METALWORKING MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

33351 METALWORKING MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing metalworking machinery, such as metal cutting and metal forming machine tools; cutting tools; and accessories for metalworking machinery; special dies, tools, jigs, and fixtures; industrial molds; rolling mill machinery; assembly machinery; coil handling, conversion, or straightening equipment; and wire drawing and fabricating machines.

333511 INDUSTRIAL MOLD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial molds for casting metals or forming other materials, such as plastics, glass, or rubber.

333512 MACHINE TOOL (METAL CUTTING TYPES) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal cutting machine tools (except handtools).

333513 MACHINE TOOL (METAL FORMING TYPES) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal forming machine tools (except handtools), such as punching, sheering, bending, forming, pressing, forging, and die-casting machines.

333514 SPECIAL DIE AND TOOL, DIE SET, JIG, AND FIXTURE MANUFACTURING

This U.S. industry comprises establishments, known as tool and die shops, primarily engaged in manufacturing special tools and fixtures, such as cutting dies and jigs.

333515 CUTTING TOOL AND MACHINE TOOL ACCESSORY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing accessories and attachments for metal cutting and metal forming machine tools.

333516 ROLLING MILL MACHINERY AND EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing rolling mill machinery and equipment for metal production.

333518 OTHER METALWORKING MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal working machinery (except industrial molds; metal cutting machine tools; metal forming machine tools; special dies and tools, die sets, jigs, and fixtures; cutting tools and machine tool accessories; and rolling mill machinery and equipment).

3336 ENGINE, TURBINE, AND POWER TRANSMISSION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive, gasoline, and aircraft).

33361 ENGINE, TURBINE, AND POWER TRANSMISSION EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing turbines, power transmission equipment, and internal combustion engines (except automotive, gasoline, and aircraft).

333611 TURBINE AND TURBINE GENERATOR SET UNITS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing turbines (except aircraft) and complete turbine generator set units, such as steam, hydraulic, gas, and wind.

333612 SPEED CHANGER, INDUSTRIAL HIGH-SPEED DRIVE, AND GEAR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing gears, speed changers, and industrial high-speed drives (except hydrostatic).

333613 MECHANICAL POWER TRANSMISSION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing mechanical power transmission equipment (except motor vehicle and aircraft), such as plain bearings, clutches (except motor vehicle and electromagnetic industrial control), couplings, joints, and drive chains.

333618 OTHER ENGINE EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing internal combustion engines (except automotive gasoline and aircraft).

3339 OTHER GENERAL PURPOSE MACHINERY MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Pump and compressor manufacturing;
- 2. Material handling equipment manufacturing; and
- 3. All other general purpose machinery manufacturing.

33391 PUMP AND COMPRESSOR MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing pumps and compressors, such as general purpose air and gas compressors, nonagricultural spraying and dusting equipment, general purpose pumps and pumping equipment (except fluid power pumps and motors), and measuring and dispensing pumps.

333911 PUMP AND PUMPING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose pumps and pumping equipment (except fluid power pumps and motors), such as reciprocating pumps, turbine pumps, centrifugal pumps, rotary pumps, diaphragm pumps, domestic water system pumps, oil well and oil field pumps, and sump pumps.

333912 AIR AND GAS COMPRESSOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose air and gas compressors, such as reciprocating compressors, centrifugal compressors, vacuum pumps (except laboratory), and nonagricultural spraying and dusting compressors and spray gun units.

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333913 MEASURING AND DISPENSING PUMP MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and dispensing pumps, such as gasoline pumps and lubricating oil measuring and dispensing pumps.

33392 MATERIAL HANDLING EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing material handling equipment, such as elevators and moving stairs; conveyors and conveying equipment; overhead traveling cranes, hoists, and monorail systems; and industrial trucks, tractors, trailers, and stacker machinery.

333921 ELEVATOR AND MOVING STAIRWAY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing elevators and moving stairways.

333922 CONVEYOR AND CONVEYING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing conveyors and conveying equipment, such as gravity conveyors, trolley conveyors, tow conveyors, pneumatic tube conveyors, carousel conveyors, farm conveyors, and belt conveyors.

333923 OVERHEAD TRAVELING CRANE, HOIST, AND MONORAIL SYSTEM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems.

333924 INDUSTRIAL TRUCK, TRACTOR, TRAILER, AND STACKER MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers (i.e., truck-type), such as forklifts, pallet loaders and unloaders, and portable loading docks.

33399 ALL OTHER GENERAL PURPOSE MACHINERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing general purpose machinery (except ventilation, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; and material handling equipment).

333991 POWER-DRIVEN HANDTOOL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power-driven (e.g., battery, corded, and pneumatic) handtools, such as drills, screwguns, circular saws, chain saws, staplers, and nailers.

333992 WELDING AND SOLDERING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing welding and soldering equipment and accessories (except transformers), such as arc, resistance, gas, plasma, laser, electron beam, and ultrasonic welding equipment; welding electrodes; coated or cored welding wire; and soldering equipment (except handheld).

333993 PACKAGING MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing packaging machinery, such as wrapping, bottling, canning, and labeling machinery.

333994 INDUSTRIAL PROCESS FURNACE AND OVEN MANUFACTURING

This U.S. Industry comprises establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and kilns (except cement, chemical, and wood).

333995 FLUID POWER CYLINDER AND ACTUATOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) cylinders and actuators.

333996 FLUID POWER PUMP AND MOTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power (i.e., hydraulic and pneumatic) pumps and motors.

333997 SCALE AND BALANCE (EXCEPT LABORATORY) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing scales and balances (except laboratory).

333999 ALL OTHER MISCELLANEOUS GENERAL PURPOSE MACHINERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing general purpose machinery (except ventilating, heating, air-conditioning, and commercial refrigeration equipment; metal working machinery; engines, turbines, and power transmission equipment; pumps and compressors; material handling equipment; power-driven handtools; welding and soldering equipment; packaging machinery; industrial process furnaces and ovens; fluid power cylinders and actuators; fluid power pumps and motors; and scales and balances).

334 COMPUTER AND ELECTRONIC PRODUCT MANUFACTURING

Industries in the Computer and Electronic Product Manufacturing subsector group establishments that manufacture computers, computer peripherals, communications equipment, and similar electronic products, and establishments that manufacture components for such products. The Computer and Electronic Product Manufacturing industries have been combined in the hierarchy of NAICS because of the economic significance they have attained. Their rapid growth suggests that they will become even more important to the economies of all three North American countries in the future, and in addition their manufacturing processes are fundamentally different from the manufacturing processes of other machinery and equipment. The design and use of integrated circuits and the application of highly specialized miniaturization technologies are common elements in the production technologies of the computer and electronic subsector. Convergence of technology motivates this NAICS subsector. Digitalization of sound recording, for example, causes both the medium (the compact disc) and the equipment to resemble the technologies for recording, storing, transmitting, and manipulating data. Communications technology and equipment have been converging with computer technology. When technologically-related components are in the same sector, it makes it easier to adjust the classification for future changes, without needing to redefine its basic structure. The creation of the Computer and Electronic Product Manufacturing subsector will assist in delineating new and emerging industries because the activities that will serve as the probable sources of new industries, such as computer manufacturing and communications equipment manufacturing, or computers and audio equipment, are brought together. As new activities emerge, they are less likely therefore, to cross the subsector boundaries of the classification.

3341 COMPUTER AND PERIPHERAL EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following:

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- 1. Store the processing program or programs and the data immediately necessary for the execution of the program;
- 2. Can be freely programmed in accordance with the requirements of the user;
- 3. Perform arithmetical computations specified by the user; and
- 4. Execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run.

Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

33411 COMPUTER AND PERIPHERAL EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers; and computer peripheral equipment, such as storage devices, printers, monitors, input/output devices and terminals. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following:

- 1. store the processing program or programs and the data immediately necessary for the execution of the program;
- 2. can be freely programmed in accordance with the requirements of the user;
- 3. perform arithmetical computations specified by the user; and
- 4. execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run.

Analog computers are capable of simulating mathematical models and comprise at least analog, control, and programming elements.

334111 ELECTRONIC COMPUTER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following:

- 1. store the processing program or programs and the data immediately necessary for the execution of the program;
- 2. can be freely programmed in accordance with the requirements of the user;
- 3. perform arithmetical computations specified by the user; and
- 4. execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run.

Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

334112 COMPUTER STORAGE DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. Examples of products made by these establishments are CD-ROM drives, floppy disk drives, hard disk drives, and tape storage and backup units.

334113 COMPUTER TERMINAL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals. Computer terminals are input/output devices that connect with a central computer for processing.

334119 OTHER COMPUTER PERIPHERAL EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing computer peripheral equipment (except storage devices and computer terminals).

3342 COMMUNICATIONS EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Telephone apparatus manufacturing;
- Radio and television broadcasting and wireless communications equipment manufacturing; and
- 3. Other communications equipment manufacturing.

33421 TELEPHONE APPARATUS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.

334210 TELEPHONE APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be stand-alone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.

33422 RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334220 RADIO AND TELEVISION BROADCASTING AND WIRELESS COMMUNICATIONS EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

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33429 OTHER COMMUNICATIONS EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

334290 OTHER COMMUNICATIONS EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, radio and television broadcast, and wireless communications equipment).

3343 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, juke-boxes, and amplifiers for musical instruments and public address systems.

33431 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

334310 AUDIO AND VIDEO EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems.

3344 SEMICONDUCTOR AND OTHER ELECTRONIC COMPONENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

33441 SEMICONDUCTOR AND OTHER ELECTRONIC COMPONENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing semiconductors and other components for electronic applications. Examples of products made by these establishments are capacitors, resistors, microprocessors, bare and loaded printed circuit boards, electron tubes, electronic connectors, and computer modems.

334411 ELECTRON TUBE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electron tubes and parts (except glass blanks). Examples of products made by these establishments are cathode ray tubes (i.e., picture tubes), klystron tubes, magnetron tubes, and traveling wave tubes.

334412 BARE PRINTED CIRCUIT BOARD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

334413 SEMICONDUCTOR AND RELATED DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing semiconductors and related solid state devices. Examples of products made by these establishments are integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells and other optoelectronic devices.

334414 ELECTRONIC CAPACITOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic fixed and variable capacitors and condensers.

334415 ELECTRONIC RESISTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and variators.

334416 ELECTRONIC COIL, TRANSFORMER, AND OTHER INDUCTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic inductors, such as coils and transformers.

334417 ELECTRONIC CONNECTOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic connectors, such as coaxial; cylindrical; rack and panel; pin and sleeve; printed circuit; and fiber optic.

334418 PRINTED CIRCUIT ASSEMBLY (ELECTRONIC ASSEMBLY) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

334419 OTHER ELECTRONIC COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except electron tubes; bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers, and other inductors; connectors; and loaded printed circuit boards).

3345 NAVIGATIONAL, MEASURING, ELECTROMEDICAL, AND CONTROL INSTRUMENTS MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

33451 NAVIGATIONAL, MEASURING, ELECTROMEDICAL, AND CONTROL INSTRUMENTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing navigational, measuring, electromedical, and control instruments. Examples of products made by these establishments are aeronautical instruments, appliance regulators and controls (except switches), laboratory analytical instruments, navigation and guidance systems, and physical properties testing equipment.

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334510 ELECTROMEDICAL AND ELECTROTHERAPEUTIC APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus, such as magnetic resonance imaging equipment, medical ultrasound equipment, pacemakers, hearing aids, electrocardiographs, and electromedical endoscopic equipment.

334511 SEARCH, DETECTION, NAVIGATION, GUIDANCE, AERONAUTICAL, AND NAUTICAL SYSTEM AND INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments. Examples of products made by these establishments are aircraft instruments (except engine), flight recorders, navigational instruments and systems, radar systems and equipment, and sonar systems and equipment.

334512 AUTOMATIC ENVIRONMENTAL CONTROL MANUFACTURING FOR RESIDENTIAL, COMMERCIAL, AND APPLIANCE USE

This U.S. industry comprises establishments primarily engaged in manufacturing automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration, and appliances.

334513 INSTRUMENTS AND RELATED PRODUCTS MANUFACTURING FOR MEASURING, DISPLAYING, AND CONTROLLING INDUSTRIAL PROCESS VARIABLES

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and related devices for measuring, displaying, indicating, recording, transmitting, and controlling industrial process variables. These instruments measure, display, or control (i.e., monitor and analyze) industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration, and rotation.

334514 TOTALIZING FLUID METER AND COUNTING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing totalizing (i.e., registering) fluid meters and counting devices. Examples of products made by these establishments are gas consumption meters, water consumption meters, parking meters, taxi meters, motor vehicle gauges, and fare collection equipment.

334515 INSTRUMENT MANUFACTURING FOR MEASURING AND TESTING ELECTRICITY AND ELECTRICAL SIGNALS

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, volt meters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

334516 ANALYTICAL LABORATORY INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous, or composite material.

334517 IRRADIATION APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing irradiation apparatus and tubes for applications, such as medical diagnostic, medical therapeutic, industrial, and research and scientific evaluation. Irradiation can take the form of beta-rays, gamma-rays, X-rays, or other ionizing radiation.

334518 WATCH, CLOCK, AND PART MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling: clocks; watches; timing mechanisms for clockwork operated devices; time clocks; time and date recording devices; and clock and watch parts (except crystals), such as springs, jewels, and modules.

334519 OTHER MEASURING AND CONTROLLING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing measuring and controlling devices (except search, detection, navigation, guidance, aeronautical, and nautical instruments and systems; automatic environmental controls for residential, commercial, and appliance use; instruments for measurement, display, and control of industrial process variables; totalizing fluid meters and counting devices; instruments for measuring and testing electricity and electrical signals; analytical laboratory instruments; watches, clocks, and parts; irradiation equipment; and electromedical and electrotherapeutic apparatus).

3346 MANUFACTURING AND REPRODUCING MAGNETIC AND OPTICAL MEDIA

This industry group comprises establishments primarily engaged in:

- 1. Manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or
- 2. Mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

33461 MANUFACTURING AND REPRODUCING MAGNETIC AND OPTICAL MEDIA

This industry comprises establishments primarily engaged in:

- 1. manufacturing optical and magnetic media, such as blank audio tape, blank video tape, and blank diskettes and/or;
- 2. mass duplicating (i.e., making copies) audio, video, software, and other data on magnetic, optical, and similar media.

334611 SOFTWARE REPRODUCING

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software. These establishments do not generally develop any software, they mass reproduce data and programs on magnetic media, such as diskettes, tapes, or cartridges. Establishments in this industry mass reproduce products, such as CD-ROMs and game cartridges.

334612 PRERECORDED COMPACT DISC (EXCEPT SOFTWARE), TAPE, AND RECORD REPRODUCING

This U.S. industry comprises establishments primarily engaged in mass reproducing audio and video material on magnetic or optical media. Examples of products mass reproduced by these establishments are audio compact discs, prerecorded audio and video cassettes, and laser discs.

334613 MAGNETIC AND OPTICAL RECORDING MEDIA MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing magnetic and optical recording media, such as blank magnetic tape, blank diskettes, blank optical discs, hard drive media, and blank magnetic tape cassettes.

335 ELECTRICAL EQUIPMENT, APPLIANCE, AND COMPONENT MANUFACTURING

Industries in the Electrical Equipment, Appliance, and Component Manufacturing subsector manufacture products that generate, distribute and use electrical power. Electric Lighting Equipment Manufacturing establishments produce electric lamp bulbs, lighting fixtures, and parts. Household

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Appliance Manufacturing establishments make both small and major electrical appliances and parts. Electrical Equipment Manufacturing establishments make goods, such as electric motors, generators, transformers, and switchgear apparatus. Other Electrical Equipment and Component Manufacturing establishments make devices for storing electrical power (e.g., batteries), for transmitting electricity (e.g., insulated wire), and wiring devices (e.g., electrical outlets, fuse boxes, and light switches).

3351 ELECTRIC LIGHTING EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Electric lamp bulb and part manufacturing and/or
- 2. Lighting fixture manufacturing.

33511 ELECTRIC LAMP BULB AND PART MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

335110 ELECTRIC LAMP BULB AND PART MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric light bulbs and tubes, and parts and components (except glass blanks for electric light bulbs).

33512 LIGHTING FIXTURE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except vehicular), nonelectric lighting equipment, lamp shades (except glass and plastics), and lighting fixture components (except current-carrying wiring devices).

335121 RESIDENTIAL ELECTRIC LIGHTING FIXTURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fixed or portable residential electric lighting fixtures and lamp shades of metal, paper, or textiles. Residential electric lighting fixtures include those for use both inside and outside the residence.

335122 COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL ELECTRIC LIGHTING FIXTURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures.

335129 OTHER LIGHTING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric lighting fixtures (except residential, commercial, industrial, institutional, and vehicular) and nonelectric lighting equipment.

3352 HOUSEHOLD APPLIANCE MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Small electrical appliance manufacturing and/or
- 2. Major appliance manufacturing.

33521 SMALL ELECTRICAL APPLIANCE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, and other electric household-type floor care machines.

335211 ELECTRIC HOUSEWARES AND HOUSEHOLD FAN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing small electric appliances and electric housewares for heating, cooking, and other purposes, and electric household-type fans (except attic fans).

335212 HOUSEHOLD VACUUM CLEANER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric vacuum cleaners, electric floor waxing machines, and other electric floor care machines typically for household use.

33522 MAJOR APPLIANCE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers, and other electrical and nonelectrical major household-type appliances, such as dishwashers, water heaters, and garbage disposal units.

335221 HOUSEHOLD COOKING APPLIANCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type electric and nonelectric cooking equipment (except small electric appliances and electric housewares).

335222 HOUSEHOLD REFRIGERATOR AND HOME FREEZER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type refrigerators and upright and chest freezers.

335224 HOUSEHOLD LAUNDRY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type laundry equipment.

335228 OTHER MAJOR HOUSEHOLD APPLIANCE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric and non-electric major household-type appliances (except cooking equipment, refrigerators, upright and chest freezers, and household-type laundry equipment).

3353 ELECTRICAL EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

33531 ELECTRICAL EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers; electric motors, generators, and motor generator sets; switchgear and switchboard apparatus; relays; and industrial controls.

335311 POWER, DISTRIBUTION, AND SPECIALTY TRANSFORMER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing power, distribution, and specialty transformers (except electronic components). Industrial-type and consumertype transformers in this industry vary (e.g., step up or step down) voltage but do not convert alternating to direct or direct to alternating current.

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335312 MOTOR AND GENERATOR MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing electric motors (except internal combustion engine starting motors), power generators (except battery charging alternators for internal combustion engines), and motor generator sets (except turbine generator set units). This industry includes establishments rewinding armatures on a factory basis.

335313 SWITCHGEAR AND SWITCHBOARD APPARATUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing switchgear and switchboard apparatus.

335314 RELAY AND INDUSTRIAL CONTROL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing relays, motor starters and controllers, and other industrial controls and control accessories.

3359 OTHER ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing electrical equipment and components (except electric lighting equipment, household-type appliances, transformers, switchgear, relays, motors, and generators).

33591 BATTERY MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing primary and storage batteries.

335911 STORAGE BATTERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing storage batteries

335912 PRIMARY BATTERY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wet or dry primary batteries.

33592 COMMUNICATION AND ENERGY WIRE AND CABLE MANUFACTURING

This industry comprises establishments insulating fiber-optic cable, and manufacturing insulated nonferrous wire and cable from nonferrous wire drawn in other establishments.

335921 FIBER OPTIC CABLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing insulated fiberoptic cable from purchased fiber-optic strand.

335929 OTHER COMMUNICATION AND ENERGY WIRE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing insulated wire and cable of nonferrous metals from purchased wire.

33593 WIRING DEVICE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices and noncurrent-carrying wiring devices for wiring electrical circuits.

335931 CURRENT-CARRYING WIRING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices.

335932 NONCURRENT-CARRYING WIRING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing noncurrent-carrying wiring devices.

33599 ALL OTHER ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing electrical equipment (except electric lighting equipment, household-type appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, and wiring devices).

335991 CARBON AND GRAPHITE PRODUCT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; carbon and graphite fibers; and other carbon, graphite, and metal-graphite products.

335999 ALL OTHER MISCELLANEOUS ELECTRICAL EQUIPMENT AND COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing industrial and commercial electric apparatus and other equipment (except lighting equipment, household appliances, transformers, motors, generators, switchgear, relays, industrial controls, batteries, communication and energy wire and cable, wiring devices, and carbon and graphite products). This industry includes power converters (i.e., AC to DC and DC to AC), power supplies, surge suppressors, and similar equipment for industrial-type and consumer-type equipment.

336 TRANSPORTATION EQUIPMENT MANUFACTURING

Industries in the Transportation Equipment Manufacturing subsector produce equipment for transporting people and goods. Transportation equipment is a type of machinery. An entire subsector is devoted to this activity because of the significance of its economic size in all three North American countries.

Establishments in this subsector utilize production processes similar to those of other machinery manufacturing establishments - bending, forming, welding, machining, and assembling metal or plastic parts into components and finished products. However, the assembly of components and subassemblies and their further assembly into finished vehicles tends to be a more common production process in this subsector than in the Machinery Manufacturing subsector.

NAICS has industry groups for the manufacture of equipment for each mode of transport - road, rail, air and water. Parts for motor vehicles warrant a separate industry group because of their importance and because parts manufacture requires less assembly, and the establishments that manufacture only parts are not as vertically integrated as those that make complete vehicles.

Land use motor vehicle equipment not designed for highway operation (e.g., agricultural equipment, construction equipment, and materials handling equipment) is classified in the appropriate NAICS subsector based on the type and use of the equipment.

3361 MOTOR VEHICLE MANUFACTURING

This industry group comprises establishments primarily engaged in:

- 1. Automobile and light duty motor vehicle manufacturing and/or
- 2. Heavy duty truck manufacturing.

33611 AUTOMOBILE AND LIGHT DUTY MOTOR VEHICLE MANUFACTURING

This industry comprises establishments primarily engaged in:

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- 1. manufacturing complete automobile and light duty motor vehicles (i.e., body and chassis or unibody) or
- 2. manufacturing chassis only.

336111 AUTOMOBILE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing complete automobiles (i.e., body and chassis or unibody) or
- 2. manufacturing automobile chassis only.

336112 LIGHT TRUCK AND UTILITY VEHICLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing complete light trucks and utility vehicles (i.e., body and chassis) or
- 2. manufacturing light truck and utility vehicle chassis only.

Vehicles made include light duty vans, pick-up trucks, minivans, and sport utility vehicles.

33612 HEAVY DUTY TRUCK MANUFACTURING

This industry comprises establishments primarily engaged in:

- manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special purpose heavy duty motor vehicles for highway use or
- 2. manufacturing heavy duty truck chassis only.

336120 HEAVY DUTY TRUCK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing heavy duty truck chassis and assembling complete heavy duty trucks, buses, heavy duty motor homes, and other special purpose heavy duty motor vehicles for highway use or
- 2. manufacturing heavy duty truck chassis only.

3362 MOTOR VEHICLE BODY AND TRAILER MANUFACTURING

This industry group comprises establishments primarily engaged in:

- 1. Manufacturing motor vehicle bodies and cabs or
- 2. Manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies, and detachable trailer chassis.

The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

33621 MOTOR VEHICLE BODY AND TRAILER MANUFACTURING

This industry comprises establishments primarily engaged in:

- 1. manufacturing motor vehicle bodies and cabs or
- 2. manufacturing truck, automobile and utility trailers, truck trailer chassis, detachable trailer bodies, and detachable trailer chassis.

The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

Motor homes are units where the motor and the living quarters are contained in the same integrated unit, while travel trailers are designed to be towed by a motor unit, such as an automobile or a light truck.

336211 MOTOR VEHICLE BODY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

336212 TRUCK TRAILER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing truck trailers, truck trailer chassis, cargo container chassis, detachable trailer bodies, and detachable trailer chassis for sale separately.

336213 MOTOR HOME MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in:

- 1. manufacturing motor homes on purchased chassis and/or
- 2. manufacturing conversion vans on an assembly line basis.

Motor homes are units where the motor and the living quarters are integrated in the same unit.

336214 TRAVEL TRAILER AND CAMPER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing travel trailers and campers designed to attach to motor vehicles;
- 2. manufacturing pickup coaches (i.e., campers) and caps (i.e., covers) for mounting on pickup trucks; and
- 3. manufacturing automobile, utility, and light-truck trailers.

Travel trailers do not have their own motor but are designed to be towed by a motor unit, such as an automobile or a light truck.

3363 MOTOR VEHICLE PARTS MANUFACTURING

This industry group comprises establishments primarily engaged in:

- 1. Motor vehicle gasoline engine and engine parts manufacturing;
- 2. Motor vehicle electrical and electronic equipment manufacturing;
- 3. Motor vehicle steering and suspension components (except spring) manufacturing;
- 4. Motor vehicle brake system manufacturing;
- 5. Motor vehicle transmission and power train parts manufacturing;
- 6. Motor vehicle seating and interior trim manufacturing;
- 7. Motor vehicle metal stamping; and/or
- 8. Other motor vehicle parts manufacturing.

33631 MOTOR VEHICLE GASOLINE ENGINE AND ENGINE PARTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle gasoline engines, and engine parts, whether or not for vehicular use.

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336311 CARBURETOR, PISTON, PISTON RING, AND VALVE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine intake and exhaust valves.

336312 GASOLINE ENGINE AND ENGINE PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding gasoline motor vehicle engines and gasoline motor vehicle engine parts, excluding carburetors, pistons, piston rings, and valves.

33632 MOTOR VEHICLE ELECTRICAL AND ELECTRONIC EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in:

- 1. manufacturing vehicular lighting and/or
- 2. manufacturing and/or rebuilding motor vehicle electrical and electronic equipment.

The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trains, and ships).

336321 VEHICULAR LIGHTING EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing vehicular lighting fixtures.

336322 OTHER MOTOR VEHICLE ELECTRICAL AND ELECTRONIC EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines.

33633 MOTOR VEHICLE STEERING AND SUSPENSION COMPONENTS (EXCEPT SPRING) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336330 MOTOR VEHICLE STEERING AND SUSPENSION COMPONENTS (EXCEPT SPRING) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

33634 MOTOR VEHICLE BRAKE SYSTEM MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336340 MOTOR VEHICLE BRAKE SYSTEM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

33635 MOTOR VEHICLE TRANSMISSION AND POWER TRAIN PARTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

336350 MOTOR VEHICLE TRANSMISSION AND POWER TRAIN PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmission and power train parts.

33636 MOTOR VEHICLE SEATING AND INTERIOR TRIM MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336360 MOTOR VEHICLE SEATING AND INTERIOR TRIM MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

33637 MOTOR VEHICLE METAL STAMPING

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336370 MOTOR VEHICLE METAL STAMPING

This U.S. industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

33639 OTHER MOTOR VEHICLE PARTS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336391 MOTOR VEHICLE AIR-CONDITIONING MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing air-conditioning systems and compressors for motor vehicles, such as automobiles, trucks, buses, aircraft, farm machinery, construction machinery, and other related vehicles.

336399 ALL OTHER MOTOR VEHICLE PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmission and power train parts, motor vehicle seating and interior trim, motor vehicle stampings, and motor vehicle air-conditioning systems and compressors).

3364 AEROSPACE PRODUCT AND PARTS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Manufacturing complete aircraft, missiles, or space vehicles;
- 2. Manufacturing aerospace engines, propulsion units, auxiliary equipment or parts;
- 3. Developing and making prototypes of aerospace products;
- 4. Aircraft conversion (i.e., major modifications to systems); and
- 5. Complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

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33641 AEROSPACE PRODUCT AND PARTS MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing complete aircraft, missiles, or space vehicles;
- 2. manufacturing aerospace engines, propulsion units, auxiliary equipment or parts;
- 3. developing and making prototypes of aerospace products;
- 4. aircraft conversion (i.e., major modifications to systems); and
- 5. complete aircraft or propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336411 AIRCRAFT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing or assembling complete aircraft;
- 2. developing and making aircraft prototypes;
- 3. aircraft conversion (i.e., major modifications to systems); and
- 4. complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336412 AIRCRAFT ENGINE AND ENGINE PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing aircraft engines and engine parts;
- 2. developing and making prototypes of aircraft engines and engine parts;
- 3. aircraft propulsion system conversion (i.e., major modifications to systems); and
- 4. aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

336413 OTHER AIRCRAFT PARTS AND AUXILIARY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or
- 2. developing and making prototypes of aircraft parts and auxiliary equipment.

Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

336414 GUIDED MISSILE AND SPACE VEHICLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing complete guided missiles and space vehicles and/or
- 2. developing and making prototypes of guided missile or space vehicles.

336415 GUIDED MISSILE AND SPACE VEHICLE PROPULSION UNIT AND PROPULSION UNIT PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

1. manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or

2. developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

336419 OTHER GUIDED MISSILE AND SPACE VEHICLE PARTS AND AUXILIARY EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in:

- 1. manufacturing guided missile and space vehicle parts and auxiliary equipment (except guided missile and space vehicle propulsion units and propulsion unit parts) and/or
- 2. developing and making prototypes of guided missile and space vehicle parts and auxiliary equipment.

3365 RAILROAD ROLLING STOCK MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Manufacturing and/or rebuilding locomotives, locomotive frames, and parts;
- 2. Manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and
- 3. Manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

33651 RAILROAD ROLLING STOCK MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing and/or rebuilding locomotives, locomotive frames, and parts;
- 2. manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and
- 3. manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

336510 RAILROAD ROLLING STOCK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing and/or rebuilding locomotives, locomotive frames, and parts;
- 2. manufacturing railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service; and
- 3. manufacturing rail layers, ballast distributors, rail tamping equipment, and other railway track maintenance equipment.

3366 SHIP AND BOAT BUILDING

This industry group comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

33661 SHIP AND BOAT BUILDING

This industry comprises establishments primarily engaged in operating shipyards or boat yards (i.e., ship or boat manufacturing facilities). Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for

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other than personal or recreational use. Boats are defined as watercraft typically suitable or intended for personal use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336611 SHIP BUILDING AND REPAIRING

This U.S. industry comprises establishments primarily engaged in operating a shipyard. Shipyards are fixed facilities with drydocks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

336612 BOAT BUILDING

This U.S. industry comprises establishments primarily engaged in building boats. Boats are defined as watercraft not built in shipyards and typically of the type suitable or intended for personal use.

3369 OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles and parts, aerospace products and parts, railroad rolling stock, ship building, and boat manufacturing).

33699 OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, metal tricycles, complete military armored vehicles, tanks, self-propelled weapons, vehicles pulled by draft animals, and other transportation equipment (except motor vehicles, boats, ships, railroad rolling stock, and aerospace products), including parts thereof.

336991 MOTORCYCLE, BICYCLE, AND PARTS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing motorcycles, bicycles, tricycles and similar equipment, and parts.

336992 MILITARY ARMORED VEHICLE, TANK, AND TANK COMPONENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing complete military armored vehicles, combat tanks, specialized components for combat tanks, and self-propelled weapons.

336999 ALL OTHER TRANSPORTATION EQUIPMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, and armored vehicles and tanks).

337 FURNITURE AND RELATED PRODUCT MANUFACTURING

Industries in the Furniture and Related Product Manufacturing subsector make furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of furniture include the cutting, bending, molding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for

furniture is not solely bending metal, cutting and shaping wood, or extruding and molding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both esthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.

Furniture may be made of any material, but the most common ones used in North America are metal and wood. Furniture manufacturing establishments may specialize in making articles primarily from one material. Some of the equipment required to make a wooden table, for example, is different from that used to make a metal one. However, furniture is usually made from several materials. A wooden table might have metal brackets, and a wooden chair a fabric or plastics seat. Therefore, in NAICS, furniture initially is classified based on the type of furniture (application for which it is designed) rather than the material used. For example, an upholstered sofa is treated as household furniture, although it may also be used in hotels or offices.

When classifying furniture according to the component material from which it is made, furniture made from more than one material is classified based on the material used in the frame, or if there is no frame, the predominant component material. Upholstered household furniture (excluding kitchen and dining room chairs with upholstered seats) is classified without regard to the frame material. Kitchen or dining room chairs with upholstered seats are classified according to the frame material.

Furniture may be made on a stock or custom basis and may be shipped assembled or unassembled (i.e., knockdown). The manufacture of furniture parts and frames is included in this subsector.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in Subsector 321, Wood Product Manufacturing. However, the multiple processes that distinguish wood furniture manufacturing from wood product manufacturing warrant inclusion of wooden furniture manufacturing in the Furniture and Related Product Manufacturing subsector. Metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in Subsector 332, Fabricated Metal Product Manufacturing. The molding process for plastics furniture is similar to the molding of other plastics products. However, plastics furniture producing establishments tend to specialize in furniture.

NAICS attempts to keep furniture manufacturing together, but there are two notable exceptions: seating for transportation equipment and laboratory and hospital furniture. These exceptions are related to that fact that some of the aspects of the production process for these products, primarily the design, are highly integrated with that of other manufactured goods, namely motor vehicles and health equipment.

3371 HOUSEHOLD AND INSTITUTIONAL FURNITURE AND KITCHEN CABINET MANUFACTURING

This industry group comprises establishments manufacturing household-type furniture, such as living room, kitchen and bedroom furniture and institutional (i.e., public building) furniture, such as furniture for schools, theaters, and churches.

33711 WOOD KITCHEN CABINET AND COUNTERTOP MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

337110 WOOD KITCHEN CABINET AND COUNTERTOP MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood or plastics laminated on wood kitchen cabinets, bathroom vanities, and countertops (except freestanding). The cabinets and counters may be made on a stock or custom basis.

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33712 HOUSEHOLD AND INSTITUTIONAL FURNITURE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing household-type and public building furniture (i.e., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337121 UPHOLSTERED HOUSEHOLD FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing upholstered household-type furniture. The furniture may be made on a stock or custom basis.

337122 NONUPHOLSTERED WOOD HOUSEHOLD FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonupholstered wood household-type furniture and freestanding cabinets (except television, radio, and sewing machine cabinets). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337124 METAL HOUSEHOLD FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing metal household-type furniture and freestanding cabinets. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337125 HOUSEHOLD FURNITURE (EXCEPT WOOD AND METAL) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing household-type furniture of materials other than wood or metal, such as plastics, reed, rattan, wicker, and fiberglass. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337127 INSTITUTIONAL FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing institutional-type furniture (e.g., library, school, theater, and church furniture). The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337129 WOOD TELEVISION, RADIO, AND SEWING MACHINE CABINET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood cabinets used as housings by television, stereo, loudspeaker, and sewing machine manufacturers.

3372 OFFICE FURNITURE (INCLUDING FIXTURES) MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

33721 OFFICE FURNITURE (INCLUDING FIXTURES) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing office furniture and/or office and store fixtures. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337211 WOOD OFFICE FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337212 CUSTOM ARCHITECTURAL WOODWORK AND MILLWORK MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing custom designed interiors consisting of architectural woodwork and fixtures utilizing wood, wood products, and plastics laminates. All of the industry output is made to individual order on a job shop basis and requires skilled craftsmen as a labor input. A job might include custom manufacturing of display fixtures, gondolas, wall shelving units, entrance and window architectural detail, sales and reception counters, wall paneling, and matching furniture.

337214 OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337215 SHOWCASE, PARTITION, SHELVING, AND LOCKER MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood and non-wood office and store fixtures, shelving, lockers, frames, partitions, and related fabricated products of wood and nonwood materials, including plastics laminated fixture tops. The products are made on a stock basis and may be assembled or unassembled (i.e., knockdown). Establishments exclusively making furniture parts (e.g., frames) are included in this industry.

337211 WOOD OFFICE FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing wood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

337214 OFFICE FURNITURE (EXCEPT WOOD) MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonwood office-type furniture. The furniture may be made on a stock or custom basis and may be assembled or unassembled (i.e., knockdown).

3379 OTHER FURNITURE RELATED PRODUCT MANUFACTURING

This industry group comprises establishments manufacturing furniture related products, such as mattresses, blinds, and shades.

33791 MATTRESS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

337910 MATTRESS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing innerspring, box spring, and noninnerspring mattresses, including mattresses for waterbeds.

33792 BLIND AND SHADE MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing one or more of the following: venetian blinds, other window blinds, shades; curtain and drapery rods, poles; and/or curtain and drapery fixtures. The blinds and shades may be made on a stock or custom basis and may be made of any material.

337920 BLIND AND SHADE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing one or more of the following:

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- 1. venetian blinds, other window blinds, shades;
- 2. curtain and drapery rods, poles; and/or
- 3. curtain and drapery fixtures.

The blinds and shades may be made on a stock or custom basis and may be made of any material.

339 MISCELLANEOUS MANUFACTURING

Industries in the Miscellaneous Manufacturing subsector make a wide range of products that cannot readily be classified in specific NAICS subsectors in manufacturing. Processes used by these establishments vary significantly, both among and within industries. For example, a variety of manufacturing processes are used in manufacturing sporting and athletic goods that include products, such as tennis racquets and golf balls. The processes for these products differ from each other, and the processes differ significantly from the fabrication processes used in making dolls or toys, the melting and shaping of precious metals to make jewelry, and the bending, forming, and assembly used in making medical products.

The industries in this subsector are defined by what is made rather than how it is made. Although individual establishments might be appropriately classified elsewhere in the NAICS structure, for historical continuity, these product-based industries were maintained. In most cases, no one process or material predominates for an industry.

Establishments in this subsector manufacture products as diverse as medical equipment and supplies, jewelry, sporting goods, toys, and office supplies.

3391 MEDICAL EQUIPMENT AND SUPPLIES MANUFACTURING

This industry group comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

33911 MEDICAL EQUIPMENT AND SUPPLIES MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing medical equipment and supplies. Examples of products made by these establishments are laboratory apparatus and furniture, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures, and orthodontic appliances.

339111 LABORATORY APPARATUS AND FURNITURE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing laboratory apparatus and laboratory and hospital furniture (except dental). Examples of products made by these establishments are hospital beds, operating room tables, laboratory balances and scales, furnaces, ovens, centrifuges, cabinets, cases, benches, tables, and stools.

For this industry, the 1997 Economic Census did not fully implement the conversion to NAICS. The data from 1997 to 2001 for NAICS industry 339111 did not include establishments primarily engaged in the manufacture of hospital beds and other hospital furniture. These establishments are included in the 2002 Economic Census data.

339112 SURGICAL AND MEDICAL INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

339113 SURGICAL APPLIANCE AND SUPPLIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, and personal industrial safety devices (except protective eyewear).

339114 DENTAL EQUIPMENT AND SUPPLIES MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material and dental cements.

339115 OPHTHALMIC GOODS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, reading glasses made to standard powers, and protective eyewear.

339116 DENTAL LABORATORIES

This U.S. industry comprises establishments primarily engaged in manufacturing dentures, crowns, bridges, and orthodontic appliances customized for individual application.

3399 OTHER MISCELLANEOUS MANUFACTURING

This industry group comprises establishments primarily engaged in one or more of the following:

- 1. Jewelry and silverware manufacturing;
- 2. Sporting and athletic goods manufacturing;
- 3. Doll, toy, and game manufacturing;
- 4. Office supplies (except paper) manufacturing;
- 5. Sign manufacturing; and/or
- 6. All other miscellaneous manufacturing.

33991 JEWELRY AND SILVERWARE MANUFACTURING

This industry comprises establishments primarily engaged in one or more of the following:

- 1. manufacturing, engraving, chasing, or etching jewelry;
- 2. manufacturing metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases);
- 3. manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter cutlery and flatware;
- 4. manufacturing, engraving, chasing, or etching personal metal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases);
- 5. stamping coins;
- 6. manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing:
- 7. cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems;
- 8. recutting, repolishing, and setting gem stones; and

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9. drilling, sawing, and peeling cultured and costume pearls.

339911 JEWELRY (EXCEPT COSTUME) MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

- 1. manufacturing, engraving, chasing, or etching precious metal solid or precious metal clad jewelry;
- 2. manufacturing, engraving, chasing, or etching personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases) made of precious solid or clad metal; and
- 3. stamping coins.

339912 SILVERWARE AND HOLLOWWARE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing, engraving, chasing, or etching precious metal solid, precious metal clad, or pewter flatware and other hollowware.

339913 JEWELERS' MATERIAL AND LAPIDARY WORK MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

- 1. manufacturing unassembled jewelry parts and stock shop products, such as sheet, wire, and tubing;
- 2. cutting, slabbing, tumbling, carving, engraving, polishing, or faceting precious or semiprecious stones and gems;
- 3. recutting, repolishing, and setting gem stones; and
- 4. drilling, sawing, and peeling cultured pearls.

339914 COSTUME JEWELRY AND NOVELTY MANUFACTURING

This U.S. industry group comprises establishments primarily engaged in one of the following:

- 1. manufacturing, engraving, chasing, and etching costume jewelry; and/or
- 2. manufacturing, engraving, chasing, or etching nonprecious metal personal goods (i.e., small articles carried on or about the person, such as compacts or cigarette cases).

This industry includes establishments primarily engaged in manufacturing precious plated jewelry and precious plated personal goods.

33992 SPORTING AND ATHLETIC GOODS MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

339920 SPORTING AND ATHLETIC GOODS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing sporting and athletic goods (except apparel and footwear).

33993 DOLL, TOY, AND GAME MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing dolls, toys, and games, such as complete dolls, doll parts, doll clothes, action figures, toys, games (including electronic), hobby kits, and children's vehicles (except metal bicycles and tricycles).

339931 DOLL AND STUFFED TOY MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing complete dolls, doll parts, and doll clothes; action figures; and stuffed toys.

339932 GAME, TOY, AND CHILDREN'S VEHICLE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing games (including electronic), toys, and children's vehicles (except bicycles and metal tricycles).

33994 OFFICE SUPPLIES (EXCEPT PAPER) MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing office supplies. Examples of products made by these establishments are pens, pencils, felt tip markers, crayons, chalk, pencil sharpeners, staplers, hand operated stamps, modeling clay, and inked ribbons.

339941 PEN AND MECHANICAL PENCIL MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing pens, ballpoint pen refills and cartridges, mechanical pencils, and felt tipped markers.

339942 LEAD PENCIL AND ART GOOD MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing nonmechanical pencils and art goods. Examples of products made by these establishments are pencil leads, crayons, chalk, framed blackboards, pencil sharpeners, staplers, artists' palettes and paints, and modeling clay.

339943 MARKING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing marking devices, such as hand operated stamps, embossing stamps, stamp pads, and stencils.

339944 CARBON PAPER AND INKED RIBBON MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing carbon paper and inked ribbons.

33995 SIGN MANUFACTURING

This industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, and displays).

339950 SIGN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing signs and related displays of all materials (except printing paper and paperboard signs, notices, and displays).

33999 ALL OTHER MISCELLANEOUS MANUFACTURING

This industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), and signs).

339991 GASKET, PACKING, AND SEALING DEVICE MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing gaskets, packing, and sealing devices of all materials.

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339992 MUSICAL INSTRUMENT MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing musical instruments (except toys).

339993 FASTENER, BUTTON, NEEDLE, AND PIN MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing fasteners, buttons, needles, pins, and buckles (except precious metals or precious and semiprecious stones and gems).

339994 BROOM, BRUSH, AND MOP MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing brooms, mops, and brushes.

339995 BURIAL CASKET MANUFACTURING

This U.S. industry comprises establishments primarily engaged in manufacturing burial caskets, cases, and vaults (except concrete).

339999 ALL OTHER MISCELLANEOUS MANUFACTURING

This U.S. industry comprises establishments primarily engaged in miscellaneous manufacturing (except medical equipment and supplies, jewelry and flatware, sporting and athletic goods, dolls, toys, games, office supplies (except paper), musical instruments, fasteners, buttons, needles, pins, brooms, brushes, mops, and burial caskets).

Appendix C. Methodology

SOURCES OF THE DATA

The manufacturing sector includes approximately 350,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of manufacturing. The amount of information requested from manufacturing establishments was dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the Annual Survey of Manufactures (ASM).

Establishments in the 2002 Economic Census are divided into those sent report forms and those not sent report forms. The coverage of and the method of obtaining census information from each are described below:

- 1. Establishments sent a report form:
 - a. ASM sample establishments. This group accounts for approximately 15 percent of all manufacturing establishments. The ASM panel covers all the units of large manufacturing establishments, as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size. For more information, see the Description of the ASM Survey Sample.

In an economic census year, the ASM report form (MA-10000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply additional information on gross book value of assets and capital expenditures. ASM establishments were also requested to provide information on retirements, depreciation, rental payments, and supplemental labor costs. For establishments not included in the ASM, these additional items were estimated using relationships observed in the ASM establishment data. The census statistics for these variables are a sum of the ASM establishment data and the estimated data for non-ASM establishments. ASM establishments were also requested to provide information for selected purchased services. The census statistics for the purchased service items were derived solely from the ASM establishments. See Appendix A. Explanation of Terms, for an explanation of these items. The census part of the report form is 1 of 220 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the 473 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries, as well as secondary products and miscellaneous services that establishments classified in these industries were likely to perform. Respondents were requested to identify the products, the value of each product, and, in certain cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry, which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided

for the respondent to describe significant materials not listed on the form.

A wide variety of special inquiries were included to measure activities peculiar to a given industry, such as operations performed and equipment used.

- b. Large and medium establishments (non-ASM). Approximately 30 percent of all manufacturing establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 220 economic census manufacturing regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.
- c. Small single-establishment companies (non-ASM). This group includes approximately 15 percent of all manufacturing establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated "short form" was used. These establishments received 1 of the 31 versions of the short form, which requested summary product and material data and totals but no details on employment, payroll, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics, because the same data were collected on the short form as on the long form. However, detailed information on products and materials consumed was not collected on the short form; thus, its use would increase the value of the "not specified by kind" (nsk) categories.

2. Establishments not sent a report form:

a. Small single-establishment companies not sent a report form. Approximately 40 percent of the manufacturing establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and the Census Bureau's ability to assign the correct six-digit NAICS industry classification to the establishment. For each six-digit NAICS industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report that requested information for assigning NAICS industry codes. Establishments below the cutoff that could be directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these establishments, but were included in the product and material "not specified by kind" (nsk) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes the administrative-record cases had only two- or three-digit NAICS group classification codes available in the files. For manufacturing, these establishments were sent a

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separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as "All other" industries within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics, other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

b. All nonemployers, i.e., all firms subject to federal income tax, with no paid employees, during 2002 are excluded as in previous censuses. Data for nonemployers are not included in this report, but are released in the annual *Nonemployer Statistics* series.

The report forms used to collect information for establishments in this sector are available at help.econ.census.gov/econhelp/resources/.

A more detailed examination of census methodology is presented in the *History of the Economic Census* at www.census.gov/econ/www/history.html.

INDUSTRY CLASSIFICATION OF ESTABLISHMENTS

The classifications for all establishments covered in the 2002 Economic Census — Manufacturing are classified in 1 of 473 industries in accordance with the industry definitions in the *North American Industry Classification System (NAICS)*, *United States, 2002* manual. There were no changes between the 2002 edition and the 1997 edition affecting this sector. When applicable, Appendix F of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar production processes. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the manufacturing sector for 2002, there are 21 subsectors (three-digit NAICS), 86 industry groups (four-digit NAICS), 184 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 473 U.S. industries (six-digit NAICS). Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. There are 1,450 product classes (seven-digit codes), 5,674 census products, and an additional 3,746 ten-digit product codes. The ten-digit products are considered the primary products of the industry with the same first six digits.

For the 2002 Economic Census — Manufacturing, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value. For 2002, there were no "resistance rules" or "frozen industries."

In ASM years, establishments included in the ASM sample with certainty weights are reclassified by industry only if the change in the primary activity from the prior year is significant or if the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year. However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The results of these rules covering the switching of plants from one industry classification to another are that some industries comprise different mixes of establishments in different survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the six-digit NAICS level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by manufacture, value of shipments, etc.) reflect the activities of the establishments that may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments, to the product statistics, the composition of the industry's output should be considered.

The extent to which industry and product statistics may be matched with each other is measured by the primary product specialization ratio and the coverage ratio. The primary product specialization ratio is the proportion of industry shipments accounted for by the primary products of establishments classified in the industry. The coverage ratio is the proportion of product shipments accounted for by establishments classified in the industry.

ESTABLISHMENT BASIS OF REPORTING

The 2002 Economic Census — Manufacturing is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports, if the plant records permit such a separation and if the activities are substantial in size.

In 2002, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures, except for data on number of establishments for a few industries.

The 2002 Economic Census — Manufacturing excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company. These data are published in a separate report series.

DESCRIPTION OF THE ASM SURVEY SAMPLE

The ASM sample is drawn for the second survey year after a census. The most recent sample was drawn for the 1999 survey year based on the 1997 Economic Census — Manufacturing. This sample will be in place through the 2003 ASM.

In 1997, there were approximately 370,000 individual manufacturing establishments. For sample efficiency and cost considerations, the establishments in the 1997 manufacturing population were partitioned into two components for developing estimates within the ASM. The details of each are described below:

1. Mail stratum. The mail stratum of the survey is comprised of larger single-location manufacturing companies and all manufacturing establishments of multiunit companies (companies

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that operate at more than one physical location). Approximately 200,000 of the 370,000 establishments in the 1997 census were assigned to the mail stratum. On an annual basis, the mail stratum is supplemented with larger, newly active single-location companies identified from a list provided by the Internal Revenue Service (IRS) and new manufacturing locations of multiunit companies identified from the Census Bureau's Company Organization Survey (COS).

For the 1999 survey, a new sample of approximately 58,000 individual establishments was selected from the mail stratum assembled from the 1997 census. Supplemental samples representing both 1998 and 1999 births (newly active establishments that were not included in the 1997 census) were also selected. Establishments selected for the sample are mailed an ASM survey questionnaire for each year through 2003.

The 1999-2003 ASM sample design is similar to the one used since 1984. Companies in the 1997 Economic Census — Manufacturing with manufacturing shipments of at least \$500 million were defined as company certainties. For these large companies, each manufacturing establishment is included in the mail sample. For the 1999-2003 sample, there are approximately 500 certainty companies collectively accounting for over 18,000 establishments.

For the remaining portion of the mail component of the survey, the establishment was defined as the sample unit. All establishments with 250 employees or more were defined as employment certainties. Across these arbitrary certainty classes, there were approximately 25,000 establishments included in the sample with certainty. Collectively, these certainty establishments accounted for approximately 80 percent of the total value of shipments in the 1997 Economic Census — Manufacturing.

Smaller establishments in the remaining portion of the mail stratum were sampled with probabilities ranging from .02 to 1.00. The initial probabilities of selection assigned to these establishments were proportionate to a measure-of-size determined for each establishment. The measure-of-size was a function of the establishment's 1997 industry classification and its 1997 product class data. For each product class (1,755) and six-digit industry (473), a desired reliability constraint was specified. Using a technique developed by Dr. James R. Chromy of the Research Triangle Institute, the initial establishment probabilities were optimized such that the expected sample satisfied all industry and product class reliability constraints, while the sample size was minimized. This technique reduces the likelihood of selecting nonrepresentative samples for individual product classes or industries.

This method of assigning probabilities based on product class shipments is motivated by the Census Bureau's primary desire to produce reliable estimates of both product class and industry shipments. The high correlation between shipments and employment, value-added, and other general statistics assures that these variables will also be well represented by the sample. The actual sample selection procedure uses an independent chance of selection method (Poisson sampling) that permits us to prevent small establishments from being selected in consecutive samples without introducing a bias into the survey estimates.

2. Nonmail stratum. The initial nonmail component of the survey was comprised of approximately 170,000 small, single-establishment companies that were tabulated as administrative records in the 1997 Economic Census — Manufacturing. The nonmail stratum is also supplemented annually using the list of newly active single-location companies provided by the Internal Revenue Service (IRS) and payroll cutoffs. Companies with payroll below the payroll cutoff are added to the nonmail stratum. For this portion of the population, sampling is not used. The data for this group are estimated based on selected information obtained annually from the administrative records of the IRS and Social Security Administration (SSA). This administrative information, which includes payroll, total employment, industry classification, and physical location, is obtained under conditions which safeguard the confidentiality of both tax and census records.

RELIABILITY OF DATA

All data compiled in the economic census are subject to nonsampling errors. Nonsampling errors can be attributed to many sources during the development or execution of the census. The following are two ways that further explain this method: ASM Estimating Procedure. Most of the ASM

estimates derived for the mail stratum are computed using a difference estimator. At the establishment level, there is a strong correlation between the current-year data values and the corresponding 1997 (base) data values. Therefore, within the mailed stratum, for each item at each level of aggregation, an estimate of the "difference" between the current year and the base year is computed from sample cases and added to the corresponding base-year values. For the 1998-2002 ASM estimates, the 1997 Economic Census — Manufacturing values serve as the base year. For the 2003 ASM, the base will be updated to be the 2002 Economic Census — Manufacturing.

Due to the positive year-to-year correlation, estimates derived using this methodology are generally more reliable than comparable estimates developed from the current sample data alone. Estimates for the capital expenditures variables are not generated using the difference estimator because the year-to-year correlations are considerably weaker. The standard linear estimator is used for these variables.

For the nonmail stratum, estimates for payroll and employment are directly tabulated from the administrative-record data provided by IRS and SSA. Estimates of data other than payroll and employment are developed from industry averages. Although the nonmail stratum contained approximately 170,000 individual establishments in 1999, it accounts for less than 2 percent of the estimate for total value of shipments at the total manufacturing level.

Corresponding estimates for the mail and nonmail components are combined to produce the estimates included in this publication. ASM Data Qualifications. The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sample lists, but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the ASM is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected ASM statistics in this report. They are represented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete-coverage value would be included in the range:

- From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.
- From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
- From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

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For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 2002 Economic Census — Manufacturing shows value of shipments data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment.

DISCLOSURE

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at www.census.gov/epcd/ec02/disclosure.htm.

The disclosure analysis for the industry statistics files is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. Nonetheless, the suppressed data are included in higher-level totals. A separate disclosure analysis is performed for capital expenditures, which can be suppressed even though value of shipments data are published.

Appendix D. Geographic Notes

UTAH

Cedar Hills is now tabulated separately due to a population increase. This change deletes territory from the Balance of Utah County.

Draper is in Salt Lake and Utah Counties.

Holladay incorporated in December 1999. This change deletes territory from the Balance of Salt Lake County.

Hooper incorporated in November 2000. This change deletes territory from the Balance of Weber County.

Hyde Park is now tabulated separately due to a population increase. This change deletes territory from the Balance of Cache County.

Morgan is now tabulated separately due to a population increase. This change deletes territory from the Balance of Morgan County.

Mount Pleasant is now tabulated separately due to a population increase. This change deletes territory from the Balance of Sanpete County.

Park City is in Summit and Wasatch Counties.

Parowan is now tabulated separately due to a population increase. This change deletes territory from the Balance of Iron County.

West Haven is now tabulated separately due to a population increase. This change deletes territory from the Balance of Weber County.

Balance of Cache County no longer includes Hyde Park, which is tabulated separately due to a population increase.

Balance of Iron County no longer includes Parowan, which is tabulated separately due to a population increase.

Balance of Morgan County no longer includes Morgan, which is tabulated separately due to a population increase.

Balance of Salt Lake County lost territory due to the incorporation of Holladay.

Balance of Sanpete County no longer includes Mount Pleasant, which is tabulated separately due to a population increase.

Balance of Utah County no longer includes Cedar Hills, which is tabulated separately due to a population increase.

Balance of Weber County lost territory due to the incorporation of Hooper and no longer includes West Haven, which is tabulated separately due to a population increase.

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Appendix E. Metropolitan Statistical Areas

SALT LAKE CITY-OGDEN-CLEARFIELD, UT COMBINED STATISTICAL AREA

Brigham City, UT Micropolitan Statistical Area

Box Elder County, UT

Ogden-Clearfield, UT Metropolitan Statistical Area

Davis County, UT

Morgan County, UT

Weber County, UT

Salt Lake City, UT Metropolitan Statistical Area

Salt Lake County, UT

Summit County, UT

Tooele County, UT

CEDAR CITY, UT MICROPOLITAN STATISTICAL AREA

Iron County, UT

LOGAN, UT-ID METROPOLITAN STATISTICAL AREA

Franklin County, ID

Cache County, UT

PRICE, UT MICROPOLITAN STATISTICAL AREA

Carbon County, UT

PROVO-OREM, UT METROPOLITAN STATISTICAL AREA

Juab County, UT

Utah County, UT

ST. GEORGE, UT METROPOLITAN STATISTICAL AREA

Washington County, UT

VERNAL, UT MICROPOLITAN STATISTICAL AREA

Uintah County, UT

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